

My Life as an Epic Win: Evaluating the Effects of a Transition to Adulthood

Course on the Self-Determined Behaviours of Young Adults

With High Functioning Autism Spectrum Disorder

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Abstract

Individuals with High Functioning Autism Spectrum Disorder (HFASD) are facing significant challenges transitioning out of high school and into adulthood. With the lack of support during this critical transition period, many young adults with HFASD find themselves depending on support from parents, being underemployed, struggling with further education and independence, and often develop mental health challenges. Recent research literature on self-determination and transition to adulthood provided strong correlational evidence that transition to adulthood programs focused on teaching self-determination are associated with better employment opportunities, higher quality education, independent living, improved social relationships, and positive leisure and recreational outcomes. The *My Life as an Epic Win* was adapted based on the self-determination model to teach individuals with HFASD acquisition of self-determined behaviours (i.e., goal setting and action planning, self-awareness of supports and strengths and weaknesses, problem solving, and self-management). The current study looked to examine the effect of the *Epic Win* curriculum on self-determination and self-determined behaviours for five participants, who had all been diagnosed with HFASD. Self-determination and self-determined behaviours were evaluated by administration of two questionnaires, delivered pre- and post-*Epic Win* course. It was hypothesized that there would be an increase in self-determination and self-determined behaviours following the completion of the *Epic Win* course. All participants demonstrated an increase in self-determination; however these gains were not significant on a statistical level. A qualitative analysis of one of the questionnaires demonstrated that there were positive trends in the way the participants viewed themselves, as well as in their ability to

develop clear and specific goals in the areas of work/career, continuing education, independence and relationships. The study's results, limitations and future direction were discussed.

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CHAPTER 1**Introduction**

The transition period from adolescence to adulthood is a difficult time for many individuals because it consists of changes in roles and exploration of life possibilities, including consideration of occupation, education, relationships, and independence (Arnett, 2000). There is great diversity in how each individual experiences this phase of life; some experience an increase in well-being, including increased self esteem, while settling into adulthood, whereas others who experience this period as confusing and, without proper support, may exhibit mental health concerns, such as depression and anxiety (Arnett, 2007). The added challenges associated with having an autism spectrum disorder make this transitional period especially daunting (Wehmeyer, Shogren, Zager, Smith, & Simpson, 2010).

Autism spectrum disorders (ASDs) are lifelong developmental disorders whose prevalence rates have increased since its identification in the early 1940s (Dixon, Tarbox, & Najdowski, 2009). The fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) characterizes ASDs by deficits in (a) social communication and interaction including problems with social initiation and response, nonverbal communication, and social awareness; and (b) restrictive, repetitive patterns of behaviour or interests including atypical speech, repetitive motor movements, and rigid adherence towards routines (American Psychiatric Association [APA], 2013). Individuals with high

functioning autism spectrum disorder (HFASD), who were previously diagnosed with Asperger Syndrome (AS) in the DSM-IV-TR (APA, 2000), are characterized by deficits in reciprocal social interaction and repetitive patterns of behaviour or interests.

Individuals with HFASD do not show deficits in receptive language or general cognitive development. In the DSM-5, these individuals are now characterized as individuals with ASD who do not have an intellectual impairment (APA, 2013). Hereafter, high functioning ASD and AS will be referred to as HFASD.

Individuals with HFASD are facing significant challenges transitioning out of high school and into adulthood (Friedman, Warfield, & Parish, 2013; Taylor & Seltzer, 2011; Wehman, Schall, Carr, Targett, West, & Cifu, 2014). Some of the major challenges associated with autism that cause the greatest problems in transition to adulthood include difficulty adjusting to change, even for small changes within daily routines, and difficulty with social interaction and understanding social cues from peers (Test, Smith, & Cater, 2014). Given that ASD is heterogeneous and each individual is unique in his or her skill acquisition, cognitive abilities, language and social skills, Test and colleagues postulate that this diversity poses added difficulties for school systems to address individual needs and create individualized transition plans during the high school years.

With ill-matched or only minimal supports during the high school transitional period, many young adults with HFASD find themselves depending on support from parents, being underemployed, struggling with further education and independence and often develop mental health challenges (Carter et al., 2013; Howlin, Goode, Hutton, & Rutter, 2004; Taylor & Seltzer, 2011). Taylor and Seltzer investigated a group of 66 young adults with ASD, who did not have intellectual disability and included those with

HFASD, all of whom graduated secondary school. In this sample, only 6.1% were employed competitively without additional support, and 12.1% were employed in the community and required support. Of the 12.1% individuals who worked competitively, most were working less than 30 hours a week with low-paying jobs. The majority of these individuals were unemployed or experienced underemployment and were living at home, and many did not participate in any activities out of the home during the day. 56% of this population spent time in sheltered workshops and had few independence skills.

In a recent Canada-wide qualitative study conducted by Stewart and colleagues (2014), they used group and individual interviews to explore environmental and personal interactions related to the transition to adulthood period for individuals with various disabilities, including ASD. Participants reported what challenges they were facing regarding the transition to adulthood and they identified what supports were needed for a more successful transition. The researchers identified six environmental interactions that influence the transition process, which they termed “complexities”.

1. *Influence of early experiences*: Participants and their parents reported that early childhood experiences of failures and struggles stayed with them during adolescence and hindered their confidence when emerging into adulthood.
2. *Accommodations*: Participants explained that accommodations and supports for them to fully participate in activities were essential for successful experiences. These supports were lacking for most individuals during this transition period.
3. *Increase in skills needed during this transition period*: With regard to skill deficits, all of the participants identified that they needed increased skills in the areas of: coping with change, problem solving, decision-making, and social skills

- with peers. The participants also identified that they needed increased self-determination, motivation, resilience in the face of challenges, and knowledge about their disability. Participants also identified the need to develop self-management strategies required for independent living skills, such as doing chores, cooking, banking and budgeting. For parents, they identified the need to learn how to advocate for the supports that their youth needed. From the interviews with participants and their parents, it became clear that a successful transition involved both youth and parent skills and knowledge coming together.
4. *Accessing information about transition:* Participants and families have identified that information about support and assistantship programs during this transitional time are sparse. Participants in this study reported that it is very difficult to find credible, regionally based information about the services that are available as they transition into adulthood. One participant reported, “*It’s difficult for teens and parents to navigate where they need to go when there is no handbook telling you what you can expect...*” This suggests the need for accurate information for transitioning youth and their families about transition to adulthood programs that are accessible and readily available across different regions of Canada.
 5. *Services and supports for youth.* Participants and their families reported their concerns regarding the inconsistency in the amount, type, and quality of services available following secondary education. Participants also reported that there are barriers created by restrictive eligibility criteria for transitional programs and limited funding, especially for those individuals with comorbid diagnoses, such as

ASD and ID and/or mental health disorders. Participants also mentioned the lack of availability of disability support workers across the region.

6. *Disability support policies.* Lastly, participants reported that there was lack of governmental and agency policies to support disabled persons in employment agencies and post-secondary educational institutions across Canada. As a result, individuals with disabilities, though capable, are denied the opportunity to obtain a job or receive assistance within the educational system. The participants of this study also reported that when support policies are available for disabled individuals, these could also be seen as barriers for the individuals. For example, participants reported that some policy frameworks assume that individuals with intellectual disability are incapable; thus, they get treated as dependents and given menial work, as there are low expectations that they will succeed.

The authors of this paper concluded by emphasizing the importance of building transition supports through family members, community members, and peers, and providing consistent transitional programs that emphasize the capacities associated with self-determination, problem solving, and self-management, all aspects of training within the *Epic Win* course.

Given that the purpose of the *Epic Win* course is to increase self-determination, a review of the self-determination literature as related to transition age youth with HFASD will follow.

Self-Determination in Transition Aged Youth

In Wehmeyer (1996), he defined self-determination as, “acting as the primary causal agent in one's life and making choices and decisions regarding one's quality of life

free from undue external influence or interference” (p. 24). Based on this definition, Wehmeyer (1999) went on to describe four characteristics or component elements of self-determined behaviours:

1. An individual acts *autonomously* if he/she acts out of his/her own interests and preferences, free from external influences.
2. An individual is *self-regulated* if he/she makes decisions and formulates action plans based on what skills he/she has in his/her repertoire.
3. An individual is *psychologically empowered* if he/she is confident in his/her ability to influence the outcomes in his/her life.
4. An individual is *self-realized* if he/she is aware of his/her own limitations and strengths and uses this knowledge in a beneficial way.

Self-determination has not been widely studied among individuals with ASD and HFASD. Instead, much of the research on self-determination has focused on individuals with intellectual disabilities (ID), learning disabilities (LD), and other developmental disabilities (DD). In a recent longitudinal study, Wehmeyer, Palmer, Shogren, Williams-Diehm, and Soukup (2013) assessed the causal relationship between school-based transitional programs that promoted self-determination in youth with disabilities. The purpose of this study was to determine whether interventions to increase self-determination, including involvement in transitional planning, among high school students with diagnosed mental retardation and learning disabilities, would increase self-determination. Self-determination was assessed using the Arc Self-Determination Scale (SDS; Wehmeyer & Kelchner, 1995) and the AIR Self-Determination Scale (AIR-SDS; Wolman, Campeau, Dubois, Mithaug, & Stolarski, 1994). Over 80 high-school campuses

were involved in this 3-year longitudinal study and special education teachers were taught multiple interventions to promote self-determination (intervention group) or interventions that were *not* expected to influence self-determination (placebo control group). In this study, 371 high school students were recruited from six states (Arkansas, Kansas, Missouri, Nebraska, Oklahoma, and Texas) and 50 school districts. At the start of the study, participants ranged in age from 14 to 20 years. The students were randomly assigned to a placebo control group or an intervention group by their high school campus. Teachers in the placebo control group were taught the self-determination interventions following the experiment. Self-determination interventions were based on evidence-based manualized programs including: *The ChoiceMaker Curriculum* (Martin, Marshall, Maxson, & Jerman, 1993); *Self-Advocacy Strategy* (Van Reusen, Bos, Schumaker, & Deshler, 2002); *Steps to Self-Determination* (2nd ed.; Hoffman & Field, 2005); *Whose Future Is It Anyway?* (2nd ed.; Wehmeyer et al., 2004); *The Self-Determined Learning Model of Instruction* (SDLMI; Wehmeyer, Palmer, Agran, Mithaug, & Martin, 2000); and the *NEXT S.T.E.P. Curriculum* (Halpern, Herr, Doren, & Wolf, 2000). Teachers were given the option of choosing which interventions they wanted to implement within their special education classrooms. The researchers predicted that total scores on the SDS and the AIR would significantly increase after three years of transition program implementation. Following this intervention, students in both the placebo control and the intervention groups showed improved self-determination; however, students in the intervention group who received multiple self-determination interventions showed significantly greater growth in self-determination as measured by the SDS and the AIR. Although Wehmeyer et al. (2013) did not collect direct measures of self-determined

behaviour, they provided strong correlational evidence that transition to adulthood programs focused on teaching self-determination for individuals with DD are associated with better employment opportunities, higher quality education, independent living, improved social relationships, and positive leisure and recreational outcomes (Carter et al., 2013; Wehmeyer et al., 2013; Wehmeyer & Schwartz, 1997; Wehmeyer, Shogren, Zager, Smith, & Simpson, 2010).

Based on review of transitional programs that teach self-determination to individuals with ID and LD, this research suggests that promoting self-determination among students with disabilities is best practice in special education (Shogren, 2013). Higher levels of self-determination have been linked to improvements within the transitional period for individuals with ID and DD, as well as to a higher quality of life and lifestyle satisfaction. (Wehmeyer & Palmer, 2003). Chou, Wehmeyer, Palmer, and Lee (2016) suggest that individuals with ASD would also benefit from transitional programs that teach self-determination.

Self-determination in individuals with ASD and HFASD has gained attention in the more recent research literature. In a review paper by Wehmeyer, Shogren, Zager, Smith, and Simpson (2010) discussing strategies to teach self-determination to individuals with ASD, they suggested that self-determination would have to be taught in a unique way to an ASD population as these individuals were seen as being more at risk for learning the component elements of self-determination (as described above) in a rote manner, rather than generalizing these elements to real life situations. Wehmeyer et al. suggested the following strategies for teaching the component elements of self-

determination by incorporating these into already existing interventions for individuals with ASD:

1. *Goal setting and attainment.* Teach individuals with ASD to objectively define goals that are attainable by breaking the goal into tasks and outlining actions needed to complete those tasks (i.e., creating an action plan or a task analysis of the component skill).
2. *Choice-making.* Interventions should provide many opportunities for individuals to make choices based on preferences. This allows an individual to exert some control over his/her own environment. As well, research has shown that allowing individuals with ASD to make choices reduces problem behaviour (Shogren, Faggella-Luby, Bae, & Wehmeyer, 2004).
3. *Problem solving.* Interventions should teach problem solving strategies, including teaching students to a) define a problem, b) identify possible solutions, c) evaluate the solutions by identifying the advantages and disadvantages for each of the outcomes, and d) make a judgement and choice based on these evaluations.
4. *Decision-making.* Like problem solving, decision-making should be taught in a systematic manner. Decision-making involves a) identifying all possible alternatives of action, b) identifying consequences of each action, c) choosing the best alternative, and e) implementing the action.
5. *Self-regulation.* Individuals who are self-regulated are able to make decisions, take actions, evaluate the actions, and modify actions as needed if obstacles arise. Interventions to teach self-regulation could incorporate self-management strategies, which will be discussed in greater detail below.

6. *Self-advocacy*. Teaching self-advocacy involves informing individuals with ASD about their rights and providing strategies for effective communication of their wants and needs. It is also important for individuals with ASD to be able to disclose information about their disability and advocate for the support that they require in order to successfully transition into adulthood (Roberts, 2010).
7. *Perceptions of efficacy and control*. Interventions should pay attention to motivational factors in the behaviour of individuals with ASD, with the goal of teaching these individuals to believe in themselves and that they have control over their life outcomes.
8. *Self-awareness and knowledge*. In order to teach individuals with ASD to be self-determined, they must understand their strengths, limitations, and unique learning needs. They should also be aware of their strengths by reflecting on how autism has impacted their lives in a positive way. Moreover, they should acknowledge the daily challenges that they face and work on problem solving strategies using a strength-bases approach. By being self-aware, these individuals will be more able to utilize this knowledge and maximize their strengths in order to be successful.

Wehmeyer and colleagues (2010) advocate for teaching the component elements of self-determination to individuals with ASD; however little research has been done to evaluate the self-determination among individuals within this population.

A recent study by Chou, Wehmeyer, Palmer, and Lee (2016), evaluated the differences in self-determination for individuals with ASD, ID, and LD. This is the first published study to compare the relative levels of self-determination in individuals with ASD to that of students with other disabilities (ID and LD). The authors wanted to inform

educators about how to promote self-determination among individuals with ASD, and distinguish how these individuals differed from the other disability groups. The researchers recruited 74 individuals (age range 13-21 years old) for each disability category and administered the Arc Self-Determination Scale (SDS; Wehmeyer & Kelchner, 1995). A multivariate analysis of covariance (MANCOVA) was performed on the four dependent variables (i.e., domains of the SDS) including: autonomy, self-regulation, psychological empowerment, and self-realization. The results indicated that individuals with ASD had significantly lower levels of autonomy compared to individuals with ID and LD. Autonomy refers to a person's levels of independence, including the ability to make decisions based on personal beliefs, values, and interests. Additionally, students with ID and ASD had significantly lower levels of self-regulation, psychological empowerment, and self-realization than students with LD. It is unclear as to why these group differences emerged; however, the authors speculated that it is the social and communication challenges that individuals with ASD face which impede their development of self-determined behaviours. Self-determination always has a social context, since it involves the ability to decipher actions that can be taken independently and actions that may need the support of others (i.e., seeking support); thus, being self-determined usually involves interactions with other people (e.g., in social problem solving; Wehmeyer et al., 2010). For this reason, these researchers advocated for programs to teach self-determination to youth with ASD that include promotion of social and communicative interactions. Chou and colleagues suggested that since interventions that teach problem solving, goal setting, choice-making, and decision making have improved both autonomy and self-determination among youth with ID and LD, it makes

sense to evaluate interventions that teach these same skills to individuals with ASD.

Another rationale for emphasizing goal setting comes from Ruble and Scott (2002) who note that individuals with ASD are usually more sequential in their goal-directed behavior and, thus, would benefit from training that allowed for sufficient practice of goal-directed actions across different life domains.

Based on the studies reviewed above, it is clear that individuals with ASD are in need of a curriculum that focuses on increasing self-determination; however research is currently lacking in the design, delivery, and evaluation of interventions that teach self-determined behaviours in this population.

Development of the *Epic Win* Course

Using Wehmeyer's model of self-determination and the eight strategies for teaching the fundamental elements of self-determination (Wehmeyer et al., 2010), the *My Life as an Epic Win* (hereafter referred to as *Epic Win*) curriculum was developed by Rebecca Ward and MA students, Liz Day, Chantel Grenier, and Bernie Shuttleworth (unpublished research project, 2013).

The *Epic Win* course was designed as a 10-week course teaching self-determined behaviours to individuals with HFASD in planning their own future in the areas of a) career, b) continuing education, c) independence, and d) relationships. These four areas are particularly important as previous literature has suggested that individuals with HFASD have poorer outcomes in these areas as they transition into adulthood with minimal supports (Carter et al., 2013; Howlin, Goode, Hutton, & Rutter, 2004; Taylor & Seltzer, 2011). Given that transitional programs that teach self-determination to individuals with ID are associated with better employment opportunities, higher quality

education, independent living, and improved social relationships (Carter et al.), it was assumed that similar training would be beneficial for individuals with HFASD. Self-determined behaviours taught in the *Epic Win* course include active listening, goal setting, action planning, problem solving, and decision-making.

The *Epic Win* course was designed for older teens and young adults (ages 17-24) with HFASD to support them in developing an “*Epic Win*” (borrowed from gaming terminology) attitude. This program used Socratic-style group discussion, modeling of skills by facilitators, skill rehearsal with peers, facilitator feedback, and homework assignments to teach and support the participants in learning self-determined behaviours for successful transition to adulthood. Over the course of the 10-weeks, participants learned how to:

1. Create a vision for their future; with long and short-term goals in the four areas of life: career/work, education, independence, and social relationships
2. Create actions plans and learn to keep in action on their plans
3. Identify ineffective thinking and action patterns that may be barriers to success
4. Develop problem solving strategies to overcome challenges
5. Build a support team through active listening and improved communication skills

Concurrently, the parents participated in their own group, with the curriculum mirroring that of the youth group, including several weeks of joint work between parents and youth around communication and active listening, followed by training in how to coach their son's and daughters on long and short term goal setting, action planning, problem solving, and action fulfillment.

In week 9 of the course, the course culminated in having participants create an Epic Life video, in which they were interviewed individually about their interests, passions, strengths, accomplishments, and goals, and about the kind of supports their needs for successful transition to adulthood. Each interview is edited to create a short (approximately 5 minute) video that participants may choose to show on the last session and can then take away from the course to share with parents and other people who support their transition.

Dr. Ward and her collaborator Robin Brennan, Director of Autism Services at Woodview Mental Health and Autism Services, received a 2012 Autism Speaks Family Service and Community Grant to deliver and evaluate the *Epic Win* program. Over 2013 and early 2014, the *Epic Win* course was delivered to five groups of teens and young adults with ASD and their parents (24 individuals). The preliminary evaluation, based on parent and participant report, suggested high course satisfaction, but only limited use of the self-determined behaviours following course completion. It was clear that the *Epic Win* course needed additional strategies to improve the participants' ability to acquire and maintain the foundational behaviours associated with being self-determined, including setting observable and measurable goals, staying in action around their goals, and problem solving barriers to successful action.

Preliminary analyses of previous *Epic Win* courses conducted over 2013-2014 as described by Drake (2016; unpublished Masters thesis) suggested that the course was not effective in significantly impacting self-determined behaviours. Drake's MA thesis used a comparative case study design involving descriptive, interpretive analysis to describe the engagement of three *Epic Win* participants in the fifth delivery of the *Epic Win*

course. Specifically, qualitative within and across participant analyses of pre- and post-course measures of self-determination were used to explore the impact on self-determination for three participants. Two measures of self-determination were used (a) the Arc's Self-Determination Scale (SDS; Wehmeyer & Kelchner, 1995), and (b) Visioning and Action Questionnaire (VAQ). The VAQ was developed by the researchers to evaluate the participant's ability to learn components of self-determination (e.g., choice making, decision-making, goal setting and attainment, problem-solving and self-awareness). A more detailed description of these tools is provided in Chapter 2: Research Methodology.

Based on Drake's (2016) analyses, there was some evidence of an increase on the SDS, but an overall increase in self-determined behaviours was not clear based on the VAQ. Responses on the VAQ indicated minor shifts in problem solving and increases in actions taken for all three participants, but did not demonstrate overall gains in self-determined behaviours. Although the analyses suggested that the course produced only slight shifts in self-determination for the three participants, this MA thesis was useful in two important ways. First, the analyses showed how these three individuals with HFASD already demonstrated certain aspects of self-determination prior to the course, which was not something that had been discussed in previous research on self-determination. Secondly, the analysis suggested several ways that the course could be improved to produce more positive gains in self-determination and better measures of course effectiveness. Drake's analyses provided encouragement to continue developing and evaluating the effectiveness of the *Epic Win* course.

The intention of the current thesis project was to improve behavioural strategies to teach self-determined behaviours to participants taking part in the *Epic Win* course. We also intended to improve assessments of self-determined behaviours before, during, and after the course to determine the course's effectiveness in teaching participants the skills needed to keep in action toward their life goals.

Enhanced *Epic Win* Course Design

Based on this previous evaluation of the *Epic Win* course (Drake, 2016), it was clear that certain modifications to the course might be needed to enhance the course's effectiveness in teaching self-determined behaviours. The following modifications were made:

1. The course was administered over 12-weeks instead of 10-weeks with the intention that these two weeks would provide time for extra practice in goal setting, action planning, and problem solving in the area of work/career.
2. A contingency contract was signed by the participants with their parents as an agreement to complete homework assignments and keep in action around their goals
3. Participants self-monitored their weekly homework completion and checked in with a peer from the group mid-week around homework completion. As an incentive for full participation (completing homework and taking promised actions), the participants received a raffle ticket for each homework assignment completed on a weekly basis. This raffle tickets went in an *Epic Win* jar. During the sixth and 12th weeks of the course, we had a draw of the raffle tickets to award one individual with a \$30 gift card to the Niagara Pen Centre.

Prior to setting specific hypotheses regarding program outcomes, it was felt that a brief review of research on the teaching of goal setting, contingency contracting, and self-management to persons with HFASD would be useful in improving our delivery and measurement strategies.

Goal Setting and Goal Attainment

An essential component in the development of self-determination is goal setting and taking actions to reach goals (Wehmeyer et al., 2010). Unfortunately, individuals with disabilities experience difficulties in choosing and expressing goals and taking action to reach goals (Wehmeyer, Palmer, Lee, Williams-Diehm, & Shogren, 2011).

The skill of goal choosing consists of a) identifying interests, skills, and limitations; b) identifying available opportunities; and c) developing educated goals based on identified interests, skills, limitations, and available opportunities (Martin, Marshall, Hughes, Jerman, & Maxson, 2000). Once goals have been chosen, an individual must be able to put that goal into action by developing an action plan that includes a) how the goal will be achieved, b) how the individual will receive performance feedback, c) identifying and providing that which motivates the individual to take action toward his or her goal, d) identifying needed supports, and f) being clear on the time frame for action taking and goal attainment (Marshall, et al. 1999).

There are limited research studies evaluating goals specific to the transition to adulthood. In a study commissioned by the Office of Special Education Programs of the U.S. Department of Education, Cameto, Levine, and Wagner (2004; as cited in Hendricks & Wehman, 2009) evaluated the presence of goals related to education, employment, independent living skills, and social development among adolescents with disabilities,

including ASD. For adolescents with ASD, most goals created for a transition plan were in the area of career and employment. Among the participants with ASD, 22% outlined goals related to seeking competitive employment, 39% to supported employment, and 39% to sheltered employment.

Within the enhanced *Epic Win* curriculum, participants set specific goals in the areas of work and career, continuing education, independent living, and relationships throughout the course. More practice time was needed to be spent on goal setting within the area of work/career, since most of the participants reported that this was the most concerning area of life; thus, in the current curriculum, two weeks were dedicated to this area. Participants were asked to create as many goals as they could think of in the area of work and career, with the intention that they would be able to achieve at least one goal within the 12-week course. The choice to put more emphasis on work/career goals was based on previous research showing transitioning adolescents are more concerned with goals pertaining to career and employment (Cameto, Levine, & Wagner, 2004).

Wehmeyer and colleagues (2010) emphasized that complex goals (e.g. getting a part-time job) should be broken down into smaller sub-goals that can be achieved within a shorter amount of time, with minimal steps (e.g. create a resume within one week; research career interests within two weeks). Through the *Epic Win* course, participants were given examples of how to set long-term and short-term goals, were given the opportunity and support to practice writing goals, determine a plan of action around their goals, and work on problem solving around barriers that actually came up while taking action on their goals. We believed that it was most beneficial for participants to develop mastery in using self-determined behaviours related to at least one goal so that they experience

themselves as capable and would leave the course with the skill and confidence to achieve their goals. Participants were given weekly opportunities to practice goal setting, action planning, and problem solving in each of the areas of life (i.e., work/career, education, independence, and relationships). It was expected that goals not achieved during the course could be completed in the weeks and months following the course, depending on the participants' time frame for their goals.

Contingency Contracting

As one of the modifications to the enhanced *Epic Win* course, participants and their parents created a behavioural contract at the start of the course. Contingency contracting is a behavioural strategy to improve self-management skills among individuals with ASD. Although contingency contracting has received minimal attention in the ASD literature (Mruzek, Cohen, & Smith, 2007), this technique has been shown useful in improving academic performance in students with neurotypical development who struggle with homework completion (Miller & Kelley, 1994), and reducing challenging behaviour within educational setting for individuals with ASD (Mruzek, Cohen, & Smith). A contingency contract, also referred to as a “behaviour contract”, is a written agreement between the youth and a parent or teacher that outlines the task that the young person has to complete, and the reward that will be provided once the task is completed (Heward, 1987). Contingency contracts have been found to promote collaboration between students and teachers, with the assumption that if students participate in the development of their contract, they will be more likely to engage in and complete the specified tasks (Mruzek, Cohen, & Smith). Based on the effectiveness of this strategy for individuals with ASD within the educational setting, it was assumed that

the use of a behavioural contract that participants helped to design might help participants in the *Epic Win* course to remain in action around their goals, as well as keep them accountable to their parent and the group to complete the assigned homework.

Parents and young adults were given a contract template and received coaching in the first session on how to individualize this contract. As part of the contract, participants were asked to complete a weekly self-monitoring homework checklist. Included in this contract, parents and young adults were supported in creating a reinforcement plan to encourage homework completion and actions taken toward goals during the course, with tangible rewards being negotiated with parents, if the young adult wished.

Self-Management

In environments that require self-directed learning, such as in university or college or even on-the-job training, it is important for individuals to be able to monitor their own behaviour and implement strategies to learn more efficiently. Self-management strategies are commonly used and applied broadly in the clinical environment. Self-management is the personal application of behavioural interventions in order to produce a desired change in behaviour (Cooper, Heron, & Heward, 2007). Self-control, a term often used interchangeably with self-management, involves behavioural strategies, including a) self-assessment—an individual assesses whether he/she performed the target behaviour, b) self-recording (or self-monitoring)—an individual records the frequency of his/her target behaviour, c) self-determination of reinforcement—an individual determines what reinforcement he/she should get for performing the target behaviour, and d) self-administration of reinforcement—an individual gives himself/herself a reinforcer contingent upon performance of the target

behaviour (Bandura & Perloff, 1967; Glynn, Thomas, & Shee, 1973). Self-management strategies teach individuals to monitor and modify their own behaviour, which is an essential component to transitioning into adulthood (Wehmeyer, Agran, & Hughes, 2000). Much of the research on self-management has found that these strategies are effective in school-based environments for diverse populations (Amato-Zech, Hoff, & Doepke, 2006; Glynn, Thomas, & Shee, 1973; Olympia, Sheridan, Jenson, & Andrews, 1994).

Intervention programs that teach self-management have several potential benefits. For example, individuals who are more actively engaged in the intervention process by evaluating their own behaviour may experience an increased motivation to accomplish tasks independently (Palmen, Didden, & Lang, 2012; Wehmeyer, Agran, & Hughes, 2000). Additionally, Palmen et al. note that, when individuals are able to monitor their own behaviour, they are motivated and more able to exert control over their lives and to be less dependent on prompts from adults; less prompt dependence is a behavioural measure of psychological empowerment and self-regulation, two component elements of self-determination (Wehmeyer, 1999).

Most of the literature on self-management focuses on increasing attention-to-task through self-monitoring, which has been found to increase on-task behaviour and decrease disruptive behaviour (Amato-Zech, Hoff, & Doepke, 2006). Self-monitoring involves self-observation and self-recording. Self-observation occurs when an individual is able to identify when they have engaged in the target behaviours. Following this self-observation, the individual will record whether the behavior being monitored has occurred. Self-monitoring have been found to decrease reliance on external agents (e.g.,

teachers, parents, peers), thus allowing learners to generalize their positive academic behaviour across various settings (Amato-Zech et al.; Cooper et al., 2007).

Although there are no studies involving teaching self-monitoring to youth or young adults with HFASD, parallels with students with LD are useful. One study conducted by Dalton, Martella, and Marchand-Martella (1999) taught self-monitoring strategies to two adolescent boys with learning disabilities who exhibited a high frequency of off-task behaviour. The self-management intervention involved the participants filling out a checklist, a behaviour rating scale, and a self-monitoring form on a daily basis. Off-task behaviour and teacher ratings of students' academic behaviour were observed. This intervention also included self-evaluation as the participants were required to complete a report card with five boxes that were checked off if they completed their self-monitoring forms. Contingent upon receiving all five check marks, the participants were given a preferred tangible. The authors found that the self-management intervention was successful in decreasing off-task behaviours and teacher ratings of student appropriate academic behaviour were found to increase while the participants were self-monitoring. This study showed the effectiveness of combining positive reinforcement with self-management to increase appropriate on-task behaviour for individuals with LD. We speculated that these self-monitoring strategies could be effective for individuals with HFASD as well, since both individuals with LD and HFASD function within the normal range of intelligence.

In addition to weekly self-monitoring of homework completion, each participant had a buddy assigned at the end of each session to check in mid-week about completion of homework tasks; the intention of the buddy system was to encourage the youth to

support each other and, in some weeks, to complete homework together. Having a peer to check in with also kept participants accountable for the actions they had promised to take each week and facilitated social support and interaction among the participants.

Purpose of this Masters Thesis

The purpose of this Master's thesis was to evaluate the effectiveness of the *Epic Win* course, which had been enhanced with behavioural strategies intended to improve the acquisition and use of self-determined behaviours during and following the course. As stated above, self-management involves a learner proactively monitoring his/her own behaviours and strategically planning actions in order to achieve goals (Cleary & Zimmerman, 2004). For the purpose of this thesis, self-management was defined as the ability of participants to monitor their own completion of homework assignments that involved practice in the use of self-determined behaviours taught in the course (i.e., active listening, goal setting, action planning, and problem solving).

The main research question was: Can delivery of the *Epic Win* course over 12 weeks effectively teach the targeted self-determined behaviours for each of the participants in the group? In order to test this research question, five participants received the *Epic win* course in the Fall of 2015. We used pre-and post- questionnaires assessing self-determination using a standardized tool (AIR SDS), as well as an indirect, self-report measure of self-determined behaviours (i.e., goal setting, action planning, problem solving and self-management) using a tool that was developed for this course (i.e. the Goal-Action Questionnaire; GAQ).

CHAPTER 2

Research Methodology

Recruitment

Five young adults aged 17-22 who were diagnosed with HFASD or Asperger's Syndrome, were recruited to participate in the study. Advertisements for participation in the *Epic Win* course were sent to various school boards and agencies working with individuals with HFASD in the Niagara and Hamilton regions (see Appendix A). Following an eligibility phone interview with each interested participant (see Appendix B), participants completed the pre-course measures to screen for inclusion in the study. The participants who met our criteria on both diagnostic and intelligence measures, were invited to participate in the study. Those who did not meet criteria for the study were given information about other local services and courses that may provide similar supports. Participants who met the criteria for the screening measures filled out a consent form to participate in this research study (see Appendix C) and an intake form of their contact information and information about their diagnoses (see Appendix D for the intake form).

Screening Measures

For the purpose of recruiting an appropriate HFASD population, the Wechsler Abbreviated Scaled of Intelligence -Second Edition (WASI-II; Wechsler & Hsiao-pin, 2011), and the High-Functioning Autism Spectrum Screening Questionnaire (ASSQ; Ehlers, Gillberg, & Wing, 1999) was completed with all potential participants to determine course eligibility.

The WASI-II is an abbreviated measure of an individual's general intellectual functioning. Based off of the full length Wechsler Adult Scale of Intelligence (WAIS) as well as the Wechsler Intelligence scale for Children (WISC), the WASI consists of the four subtests (vocabulary, similarities, block design, and matrix reasoning), which have the highest correlation with general intelligence (McCrimmon & Smith, 2013). The test demonstrates good to excellent internal, test-retest, as well as inter-rater reliability. Scores obtained on the WASI-II correlate highly with full-length intelligence tests, providing evidence of concurrent validity (McCrimmon & Smith). For the purposes of this study, each potential participant completed the WASI-II. Individuals who obtained a full scale IQ score of less than 85 were not eligible for this study, in order to prevent obtaining participants with a comorbid intellectual disability.

The ASSQ is a diagnostic screening tool for HFASD. The questionnaire is designed to be completed by a teacher or parent, and is comprised of questions pertaining to the diagnostic features of HFASD as well as Asperger's syndrome (Ehlers, Gillberg & Wing, 1999). The psychometric properties of the ASSQ demonstrate concurrent validity with clinical assessment, adequate divergent validity with the diagnoses of ADHD, and behavioural disorders and excellent test-retest reliability (Ehlers et al.). Along with proof of diagnosis, the ASSQ will serve as a validation measure, ensuring that all participants have sufficient symptoms to meet ASD criteria. Individuals who did not meet the cut-off score for ASD on the ASSQ (score of 19) and/or score under 85 on the WASI-II, were excluded from the study. See Appendix E for the ASSQ.

Participants

See Table 1 for a summary of the participant demographic information.

Melanie. The first participant who was recruited for the *Epic Win*, Melanie, was a 22-year-old female who was diagnosed with Asperger's Syndrome. She met all the eligibility requirements for inclusion for this study. At the time of recruitment, she was enrolled in the final year of her university undergraduate program, working towards the completion of her Bachelor's degree. Melanie did not have a clear idea as to what she wanted to do following her completion of her Bachelor's degree.

Mark. Mark was a 17-year-old male who had a formal diagnosis of Asperger's Syndrome and Tourette Syndrome. He met all the eligibility requirements for inclusion for this study. Mark was also dealing with a generalized anxiety disorder. At the time of recruitment, he was in the final year of high school and he was participating in a co-op program at a grocery store.

Teresa. The third participant who was recruited for this study was a 20-year-old female who had a formal diagnosis of Asperger's Syndrome. She met all the eligibility requirements for inclusion for this study. At the time of recruitment, she was in the final year of a college program with a clear intention to have a career as an Educational Assistant working with children with special needs within the school system. However, Teresa was struggling with the completion of the EA program as she had twice failed the required computer software courses.

Kevin. The fourth participant who was recruited for this study was a 17-year-old male who had a formal diagnosis of Asperger's Syndrome. Kevin met the eligibility criteria for his age, formal diagnosis, and intelligence; however, he did not meet the eligibility criteria on the ASSQ. We included him in this study because he was diagnosed with Asperger's Syndrome relatively recently, and we speculated that his father may not

have been as sensitive to all the ASD symptomatology. At the time of recruitment, Kevin was in the final year of high school and he enjoyed playing video games and was interested in pursuing video game design as a career.

Kayla. The fifth participant who was recruited for this study was a 19-year-old female who had a formal diagnosis of Asperger's Syndrome. She met all the eligibility requirements for inclusion for this study. At the time of recruitment, she had been given an academic suspension from a college program she was enrolled in, after failing most of her courses. She had moved back home following this suspension.

Table 1.
Participant Demographic Information

	Sex	Age	IQ	Formal Diagnosis	ASSQ Score
Melanie	Female	22	129	Asperger's Syndrome	22
Mark	Male	17	112	Asperger's Syndrome	22
Teresa	Female	20	84	Asperger's Syndrome	29
Kevin	Male	17	108	Asperger's Syndrome	14
Kayla	Female	19	124	Asperger's Syndrome	29
Average		19	111.4		23.2
		(SD = 2.12)	(SD = 17.54)		(SD = 6.22)

Experimental Measures

Two dependent measures were used to assess participants' self-determination. The measures that were administered include: The AIR Self-Determination Scale (AIR SDS) and the Goal Action Questionnaire (GAQ). These experimental measures were

administered twice to each participant: once prior to the start of the *Epic Win* course, and once again in the last session of the course.

The American Institutes for Research Self-Determination Scale (AIR SDS).

The AIR Self-Determination Scale (Wolman, Campeau, Dubois, Mithaug, & Stolarski, 1994) is a standardized measure of self-determined behaviours among adolescents that can be completed by a teacher, parent, or the student. It is comprised of two subscales: the Capacity Scale consists of questions regarding students' abilities to engage in self-determined behaviours. The Opportunity Scale consists of questions regarding the opportunities students have to engage in self-determined behaviours at home and school. The student version of the AIR SDS is a 24-item self-administered questionnaire. The psychometric properties of the scale are good, with adequate internal consistency, and test-retest reliability (Wolman et al., 1994). See Appendix F for a copy of the AIR SDS.

Goal-Action Questionnaire. The Vision-Action Questionnaire (VAQ) was developed as a pre-post measure for the *Epic Win* course, created by the thesis supervisor, Dr. Rebecca Ward, and a previous MA student, Allison Drake. For the present study, the VAQ was modified to reflect the changes that were incorporated into the enhanced *Epic Win* course. The VAQ was modified to include an assessment of self-determined behaviours and self-management skills using Likert scales and the name was changed to the Goal-Action Questionnaire (GAQ). The GAQ consists of questions related to the participant's vision and goals for the next 1-5 years. The purpose of the GAQ is to assess whether gains have been made from pre- to post-course on measures of goal setting, action planning, self-awareness related to supports needed, self-awareness related to diagnosis, problem solving and decision-making, as well as to measure how

competent the participants reported they were in managing their own actions and behaviour. Questions on the GAQ pertain to (1) the goals they have in each of four areas of life (i.e., career, education, independence, and relationships) and any actions taken toward achieving these goals, (2) participants' perceptions of current social supports with respect to goals, (3) participants' perceptions of their diagnoses, including the strengths and challenges associated with their diagnoses that can impact their transition to adulthood, (4) problem solving skills around possible obstacles to goal attainment, and (5) self-management skills. Each aspect of the GAQ had participants respond to questions with ratings on a 5-point Likert scale. See Appendix G for a copy of the GAQ. See Appendix H for a scoring sheet that was developed to quantitatively analyze the GAQ.

Inter-Rater Reliability (IRR). Inter-rater reliability (IRR) was calculated for the GAQ at pre- and post-course based on the GAQ scoring sheet (Appendix H). In order to measure the reliability of the GAQ, an external and independent Research Assistant was trained to score the participants' pre-and post-test GAQ using the scoring sheet designed by the principal student investigator. The training involved presenting the RA with hypothetical responses similar to those that the participants reported for each of the sections on the GAQ, and having the RA score the responses using the scoring sheet. Following the training, the RA was given a sample GAQ to score (Kayla's pre-GAQ, which was included in the reliability calculation); the RA obtained 100% on this training assessment. To ensure the RA continued to score responses consistent with the coding scheme, IRR was calculated by dividing the smaller score of the two raters by the larger score on each of the GAQ indices, which was then multiplied by 100. Pre and post course

IRR estimates were then added together, and then divided by two to obtain a final total IRR estimate for each of the participants. To ensure that the GAQ scoring sheet was reliable between observers, a criterion of 80% or higher agreement was established. IRR was for the GAQ was 90-100% for each of the participants on both pre- and post-course administrations. The RA's scoring of GAQs for each of the participants were used within the qualitative and non-statistical analysis of the GAQ.

Procedure

Experimental Protocol. Following recruitment, participants received the *Epic Win* curriculum starting in September 2015. In the late summer, every participant completed the pre-experimental measures (AIR SDS and the GAQ). Two MA student facilitators (including this author) ran the young adult sessions, under the supervision of Dr. Ward. Dr. Ward and another MA student facilitated the concurrent parent sessions. To ensure that the delivery of the course was standardized across the concurrent sessions, all facilitators followed the same script for each session (see Appendix I for outline of each session). The MA students and Dr. Ward developed the weekly scripts (see Appendix J for examples of two session scripts) based on the past deliveries of the *Epic Win* course with other cohorts; for practice, the two MA students had participated in the most recent 6th delivery of the *Epic Win* course.

The *Epic Win* course ran for 12-weeks, with the young adult and parent group running concurrently. The parent group was provided with a curriculum parallel to that of the young adult group; a significant proportion of parent group time was spent discussing issues parents had in dealing with teaching and supporting their young adults in

developing self-determined behaviours. Data collected from the parent group were not included within the scope of this thesis.

The *Epic Win* course that was delivered for this thesis was modified from the original design in several important ways, as mentioned above. The rationale for these course modifications was based on feedback from previous *Epic Win* groups and a previous evaluation of the course (Drake, 2016). It was an interest in career and work that drew most participants to the *Epic Win* course. We postulated that developing high proficiency (i.e., fluid performance without need for extra supports) in the use of self-determined behaviours in the area of career and work would be most beneficial to the participants. As well, facilitators of previous *Epic Win* groups found it challenging to complete all components in the curriculum within 10-weeks. Therefore, two extra weeks were added and dedicated to goal setting, action planning, and problem solving in the area of career and work. In extending the program to 12 weeks, we expected that participants would develop higher proficiency in using self-determined behaviours given that they were receiving more practice in active listening, goal setting, action planning, and problem solving during the sessions, as well as more opportunities to practice skills through homework assignments. High proficiency in the use of self-determined behaviours was defined as independent use of the strategies outside of the session, as measured by gains on the GAQ. Since all of the participants had IQs in the normal range (with only one participant, Teresa, at the low end of the average range), we did not expect cognitive impairments to affect the acquisition of the target skills.

During the course, weekly homework data were taken on each participant. Firstly, number of homework tasks assigned and completed (e.g., calling their assigned buddy;

practicing specified skills with parents) was self-reported by the participants on a weekly basis. Secondly, number of goal-related actions promised and corresponding actions taken, as well as ability to self-identify barriers to task completion were self-reported by the participants on a weekly basis. The parent group facilitators also asked parents to verify that their young adult completed the weekly homework. See Appendix K for an example of a weekly homework data tracking form.

In addition to the pre- and the post-administration, the GAQ was administered to the participants during the sixth session of the *Epic Win* course, which is the midway point. This GAQ served as a probe, to determine whether participants were making gains on self-determined behaviours while they were halfway through the course content.

Following the completion of the fall *Epic Win* course, the post-experimental measures (AIR SDS and the final GAQ) were administered to all the participants on the 12th and final session of the course. For one participant, Melanie, who had university exams at the 12th week, she completed these measures one month following the course completion.

***Epic Win* Curriculum Sequence**

1. The first three sessions focused on self-awareness, including understanding strengths and challenges associated with having an ASD, the impact of limiting beliefs and strategies for overcoming limiting beliefs, and exploring existing and possible supports needed for success. Participants were introduced to the key components of being self-determined: (1) goal setting and action planning, (2) problem-solving, (3) decision making, and (4) goal attainment (i.e., making promises and taking action consistent with promises).

2. As well, participants were taught and practiced active listening with each other as a way to promote group participation and cohesion, to model self-determined behaviours, and to build listening and empathy skills. In each session, there was at least one active listening exercise, with six sessions involving active listening between the youth and another participant's parent, and later with his/her own parent. Based on previous iterations of the *Epic Win*, it was observed that some young adults and their parents had a difficult time when practicing active listening with the other, depending on the parent-child dynamic. We found that it was beneficial to introduce the participants to the active listening exercises with another young adult's parent, in order to set the participants up for success and avoid any negative interactions between parents and their young adults during the learning process. This decision was based on our clinical impressions; however, there were no behavioural studies found that look at teaching active listening skills to parents and their children or teens.
3. Over the first 3 sessions, participants were provided with self-management strategies to increase the probability of their success in acquiring self-determined behaviours. Self-management strategies consisted of making weekly homework promises related to goal attainment, taking actions consistent with these promises, and monitoring these goals and actions by completing a weekly homework checklist. The use of these self-management strategies was tracked on a weekly basis through the completion and submission of their homework checklists.
4. By Session 4 of the course, participants developed at least one, if not more, specific short-term goals (SMART goals - simple, measurable, achievable,

relevant, and within a time frame) related to areas of life that matter to them (e.g., job/career, higher education, independence, and relationships) with the expressed intention that each participant would achieve some of these goals by the end of the course.

5. Through practice across Sessions 5 to 11, participants learned a) goal setting and action planning, b) problem solving, c) decision making, and d) goal attainment. Teaching methods included group discussion, modeling, role-playing and practice, active listening exercises, in-session practice with parents/guardians, and homework assignments.
6. In Sessions 5 and 6, the participants focused on the areas of career and work; sessions 7 and 8 focused on higher education (usually related to career goals); sessions 9 on independence; and Session 10 on relationships. Sessions provided practice on the following components: active listening, developing SMART goals, creating action plans, and problem solving around specific problems related to goal attainment.
7. At the beginning of each session, participants reported to the group as to whether or not they completed homework and promised actions. Actions completed were acknowledged and efforts praised. If a participant reported that any problems or barriers were encountered in completing their promised actions or homework assignments, facilitators involved the whole group in problem solving around these barriers. By having participants contribute to each other in problem-solving, not only did that person get clear on new actions to take to increase success, all participants got practice in the process of problem solving. Participants were

- encouraged to write down new actions generated from problem solving and take these actions during the week as part of their homework.
8. It was intended that guest speakers would be invited to address topics associated with the four areas of life targeted (e.g., work/career: resources in the community to help youth find work; higher education: tools for choosing an appropriate career path; independence: community supports for learning independence; relationships: resources and strategies for friendship development). During the administration of this *Epic Win* course, we only had one guest speaker from the community attend the group who discussed and distributed information about local resources regarding job coaching and job finding skills.
 9. Behavioural strategies to increase program effectiveness:
 - a. Youth participants, parents/guardians and the Principal Investigator created a behavioural contract at the start of the course (see Appendix K). As part of the contract, participants agreed to complete homework assignments on a weekly basis, to take promised actions, and to complete a self-monitoring homework checklist for each session.
 - b. Participants learned and practiced self-management strategies that consist of monitoring their goals and actions by completing weekly homework checklists. Participants recorded whether they completed their homework and if any problems came up that prevented them from completing one or more of the tasks.
 - c. Each week, participants had a buddy assigned (through random selection). At the end of each session, buddies worked out when they will phone each other

to discuss completion of homework tasks or promised actions, and to encourage and support each other. Having a buddy to call was designed to keep participants accountable to the actions they have promised to take each week and facilitated social support among the participants.

- d. As an incentive for full participation (completing homework and taking promised actions), the participants received a raffle ticket for each homework assignment completed on a weekly basis. This raffle tickets went in an *Epic Win* jar. During the sixth and 12th weeks of the course, we had a draw of the raffle tickets to award one individual with a \$30 gift card to the Niagara Pen Centre.
10. In session 11, each participant had the option to be individually interviewed by one of the course facilitators and this interview was videotaped. In the interview, each participant answered questions about their interests, strengths, aspirations, specific goals in each area of life, accomplishments in the course and supports around transition to adulthood. Each of their videos were edited by the videographer over the next week to create a 5-min Epic Life Video and saved to a memory stick for each participant to keep; participants were encouraged to share the video with family, educators, health professionals, or anyone supporting their transition to adulthood.
 11. Session 12, the last session, was an opportunity to celebrate the achievements of the participants and parents/guardians during the course, to discuss next steps, and to view the Epic Life Videos (for those who wished to share). Creating these Epic Life Videos are standard practice in the *Epic Win* curriculum; however, if a

participant chose not to complete a video, we presented them with other visual options to represent their achievements over the course and their goals for the future. (One of the five participants in this cohort chose not to do the video.)

Data Analysis

The small sample size ($N = 5$) effectively reduced the power that the research design had to detect significant changes using conventional group parametric statistics. It was clear that group parametric statistics would not measure anything meaningful for this study. Thus, it seemed more meaningful to assess the change in an individual's score pre- and post *Epic Win*, to determine whether individual participants made gains in self-determination and self-determined behaviours. In order to assess whether each participant made statistically significant gains from their pre- and post scores on measures of self-determination, the Reliable Change Index (RCI; Jacobson & Truax, 1991) was calculated. The RCI is commonly used in psychotherapy research evaluating treatment effects (Jacobson & Truax). The RCI is calculated by subtracting the individual's score before the intervention from their score after the intervention then dividing that number by the standard error of the difference of the test (i.e. changes in scores are evaluated against the reliability of the assessment tool). The RCI is useful because it has the ability to inform us about whether an individual's score on a post-assessment has significantly changed from scores on a pre-assessment, following a treatment. The RCI helps to determine whether or not changes in scores are meaningful beyond the measurement error a tool introduces and, therefore, whether these changes represent clinically significant change. The RCI is useful, especially in analyzing therapeutic outcomes on a case-by-case basis. It was possible to calculate the RCI for the

pre-post-AIR SDS total scores for three out of the five participants to determine whether there were significant changes in self-determination between pre-post scores for each participant. Mark's pre-test AIR-SDS was never administered as an oversight by the researchers, and Kevin's pre-test AIR-SDS was lost; thus, we were unable to evaluate changes in total self-determination for these two participants.

Initially, we had considered using the RCI to also analyze the GAQ pre-post data. However, a descriptive analysis of the GAQ revealed that there were very wide standard deviations and there was low test-retest reliability on the five indices; thus, the principal student investigator and Dr. Ward decided that calculating the RCI on the GAQ was not appropriate. Therefore, the GAQ was analyzed using a qualitative and non-statistical approach. A RA scored the participants' pre-, probe-, and post-test GAQ administrations using the scoring sheet found in Appendix H. The RA scored the Goal and Action index of the GAQ for (1) the number of goals reported, (2) a rating of how observable and measurable were each of these goals, (3) the number of actions reported, and (4) a rating of the relatedness of these actions taken toward the goals specified. The RA scored the Support index of the GAQ for (5) the number of individuals the participant reported who provided support, as well as (6) a rating of how specific the participant was in identifying the supports received, and, finally, (7) a rating of their thoughts about improving their support system. For the Understanding Yourself index, the RA scored the participants for (8) their awareness of their diagnoses and for (9) the clarity of their responses to questions about their strengths and weaknesses in regards to their transition to adulthood. For the Problem Solving index in which the participants had to imagine themselves in various problem scenarios related to transition to adulthood, the RA scored (10) whether

the problem was specific and clear, (11) the number of solutions identified, and (12) the clarity and relatedness of the solutions to the problem. Lastly, the Self-Management index of the GAQ was scored based on a Likert-scale for questions related to self-management strategies, (13) specifically, the number of strategies that the participants reported, and (14) the clarity of their responses. Scoring across these 14 measures yielded a score in each of the 5 indices, which could be compared pre- and post-training.

Additionally, a qualitative analysis of the GAQ responses was conducted to determine whether improvements were made in self-determined behaviours. It should be noted that the probe-GAQ (at week 6) was only compared to the pre- or post-GAQ when the participants left a section blank on the GAQ at one administration.

From the weekly homework checklists, the percentage of completed homework assignments across the *Epic Win* course was calculated for each participant. We were interested to know if there was a relationship between the degree to which participants completed their homework assignments over the course and the degree to which self-determined behaviours increased following the *Epic Win* course.

Hypotheses

1. AIR SDS: it is expected that the total AIR SDS score will be moderately low for each of the participants at pre-test. At post-test, the total AIR SDS scores will show clinically significant improvements for each participant, as measured by the change in the reliability change index (RCI) for each participant.
2. GAQ: it is expected that participants' self-determined behaviours would increase following completion of the *Epic Win* course, as measured by a

qualitative analysis of the participants' responses on the GAQ. We expected an increase in the specificity and clarity of the participants' responses on the five subscales of the GAQ: Goal and Action-Planning, Supports, Understanding Yourself, Problem Solving, and Self-Management. We also expected that participants would have taken more actions related to their goals in the weeks following the *Epic Win* course than in the weeks prior to the course.

3. Homework: it is expected that participants who had a high percentage (80% and higher) of homework completion would have made the most gains on the GAQ, as measured by a visual and non-statistical comparison of the homework completion and gains made on the GAQ.

CHAPTER 3

Results

Quantitative Analysis of the AIR-SDS

Refer to Table 2 for the descriptive statistics calculated for the RCI, for both the AIR-SDS and the GAQ.

Quantitative analysis using RCI was possible for three of the five participants who had both pre- and post-course AIR-SDS. For both Mark and Kevin, the pre-course AIR-SDS was not available. For Mark, through an oversight, we did not administer the AIR-SDS in time, prior to the administration of the *Epic Win* course. For Kevin, we lost his pre-course AIR-SDS.

Melanie. Melanie demonstrated an eight-point increase in total self-determination score on the AIR-SDS. This did not constitute a clinically statistically significant change, $RC = 0.82, p > .05$.

Teresa. Teresa demonstrated a 10-point increase in total self-determination score on the AIR-SDS, which did not constitute a clinically statistically significant change, $RC = 1.03, p > .05$.

Kayla. Kayla demonstrated a three-point increase in total self-determination score on the AIR-SDS. This did not constitute a clinically statistically significant change, $RC = 0.31, p > .05$.

Refer to Figure 1 for a graphical display of the total scores on self-determination on the AIR-SDS for each participant at pre- and post-test.

Table 2
Reliable Change Index Statistics

	Reliability	Standard Deviation	Reliable Change Criterion
GAQ – Goal and Action-Planning	.47	9.45	19.03
GAQ – Support	.22	1.30	3.19
GAQ – Understanding Yourself	.94	2.78	1.92
GAQ – Problem Solving	.19	14.25	35.65
GAQ – Self-Management	.53	8.93	16.19
AIR-SDS	.74	13.45	19.01

Note: Reliable change criterion refers to the number of points in change required for a change in score to be considered reliable.

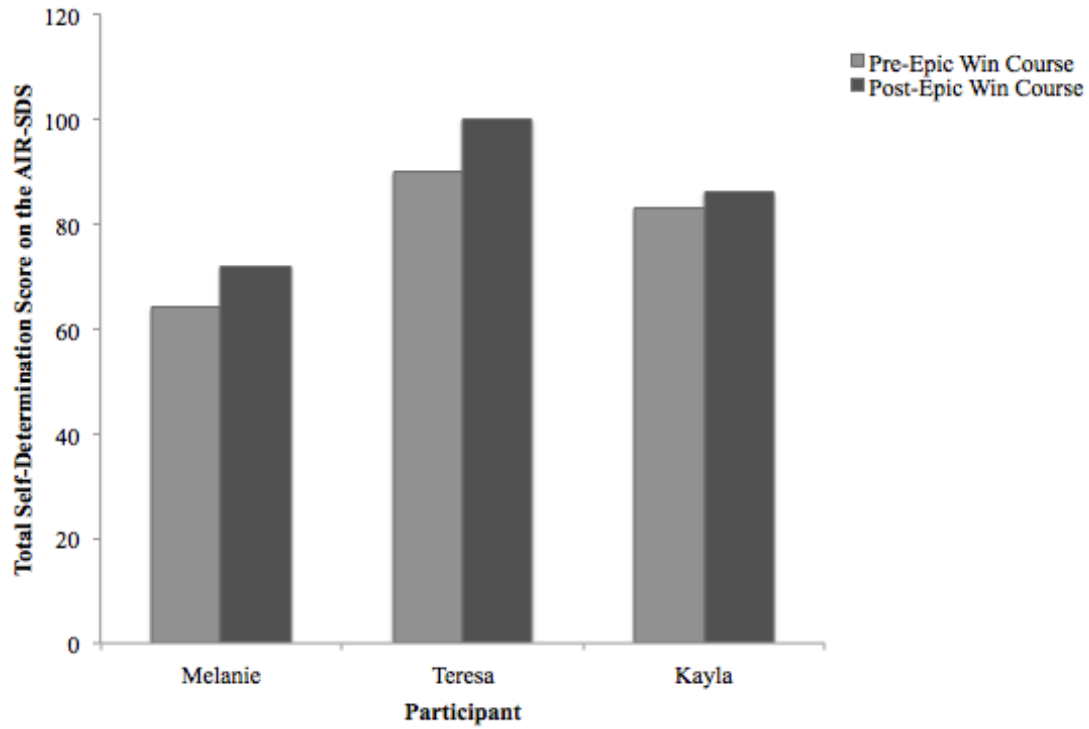


Figure 1. Comparison of the total scores on self-determination on the AIR-SDS for 3 or 5 participants, before and after the administration of the *Epic Win* course.

Table 3

Summary of the changes made on the GAQ for each participant from pre- to post-test.

Participant	Goal and Action Planning	Supports	Understanding Self	Problem Solving	Self-Management
Melanie	-14	+3	0	-2	+5
Mark	-6	+2	0	+3	-2
Teresa	+2	-2	0	-1	-1
Kevin	0	0	0	-1	-7
Kayla	+8	0	-1	Unable to compare*	+6

* Kayla left both her pre- and probe-GAQ Problem Solving index blank; thus, we were not able to compare changes made on this index.

Qualitative Analysis of the GAQ

Refer to Table 3 for a Summary of the changes made on the GAQ for each participant from pre- to post-test based on the scoring criteria.

Melanie.

Career/Work. Prior to the *Epic Win* course, Melanie reported that her goal was to find a summer job that pays well and is satisfying. At that time, some of the actions she took consisted of updating her resume and applying for some jobs. She was not specific about where she wanted to work, in what field of work she was interested, or what were the kinds of jobs she applied for. After the completion of the course, Melanie's goals in

the area of career/work became more specific. She reported, “*My long-term goal is to start a career in the area of editing or publishing...I want a career connected to books and writing in some way.*” Even her actions taken to achieve this goal became clearer; she discovered an internship at a publishing house that she applied for, and she connected with a job coach to assist her in finding employment opportunities within her field of interest.

Continuing Education. Melanie’s goals in the area of continuing education at pre-course were to complete her Bachelor of Arts and to research post-graduate college courses that are “*job-specific*”. At post-course, her goal to attend a post-graduate program became more specific because she stated that she wanted to attend a college program related to journalism or editing. Melanie’s actions taken towards these goals remained the same from pre- to post-*Epic Win*, as the only action she reported was working towards the completion of her Bachelor of Arts degree.

Independent Living. Prior to the *Epic Win* course, Melanie reported that she wanted to live in an apartment in Toronto, within the next five years. She also reported that she wants to be more organized and responsible. On her post-GAQ, Melanie’s goals in the area of independent living did not change; the goals did not become clearer or more specific following the *Epic Win* course. At pre-course, the only actions related to independent living that Melanie reported were organizing her room and doing laundry. At post-course, her reported actions became more related to her long-term goal of moving out of her parents’ house. Melanie reported that she began to discuss with her mom the topic of moving out and the finances required.

Relationships. Her goals in the area of relationships at pre-course included: staying in contact with her brother, improving her relationship with her mother, having a romantic relationship, and making more friends through school. At post-course, Melanie's goals became more focused on building friendships, as she said, *"I want to make friends that are more than acquaintances, and who I will stay in touch with; people who I can trust and talking to and feel less anxious around."* Although Melanie reported less goals in the area of relationships at post-course, she became more clear regarding her goal to build new friendships, which is something that was extremely important to her. Additionally, this goal is better matched to her actual abilities, given a history of no friendship. At pre-course, the only action that she reported was having conversations with classmates after classes. At post-course, Melanie took more actions related to her goal; she went to a movie with a friend, emailed another classmate to remain in touch, and decided to explore making friends online. It is clear that Melanie's goal to make more friends became more focused, and by the end of the course, she took more actions to achieving this goal.

In general, Melanie's scores on her pre- and post-GAQ reflected a decrease of 14-points on her Goal and Action index of the GAQ. Based on the qualitative analysis above, this drop in score did not appear to truly reflect Melanie's ability to set goals and take action on these goals. For example, in the area of work/career, Melanie's goal became more specific and her actions were more related to her goal, at post-test. Instead, we attributed this drop in score as a result of the scoring criteria for this index, which would need to be modified to better reflect these clinical changes. Please see the

Limitations of this Study section within Chapter 4 for a discussion of how the scoring criteria for the GAQ might be changed.

Supports. At pre-course, Melanie reported that her supports include her parents, especially her mother. When asked how she is supported, she wrote, *“my mom helps me to break down some of my goals into smaller parts, pushes me to take steps towards those goals, to get past obstacles, and to see what is realistic.”* When asked what supports are needed, that she does not already have, Melanie reported that she needed support that was more positively motivating. At post-course, she reported that not only did her parents support her, but also her job coach. She was able to identify that her mother supports her financially, in planning ahead realistically, and in finding resources to obtain a job. She also reported that her job coach supported her in strengthening her resume and interview skills, and helping to advocate for the kinds of accommodations she would need in a job setting. It was evident that Melanie’s supports increased following *Epic Win* course. When asked again what kinds of supports are needed, but that she doesn’t already have, Melanie gave a much more specific and clear response about the kinds of supports she is looking for. She said,

“I need support that is more positive, less intent on having everything in my life 100% structured. I need support that gives me choice whether or not something/some resource will actually help me; will allow me to make more of my own choices; will allow me to have my say; will treat me like an adult always; and will not assume they know better than me what I need.”

These pre-course GAQ responses reflected an increase in her description of support, suggesting an increased awareness of her support needs, which is consistent with the scoring criteria that identified a three-point increase on this index at post-course.

Understanding Yourself. Melanie was aware of her diagnosis of Asperger's Syndrome at pre-course. Even before the course began, she was able to list some challenges and strengths associated with having a diagnosis of Asperger's Syndrome. Some of the challenges she mentioned included, difficulty forming relationships and making friends, trouble dealing with stressful situations, and difficulty being organized or independent. The only strength she listed included, "*when I am very interested in something, I am very motivated*". Following the *Epic Win* course, Melanie was able to relate her challenges and strengths to how these would impact her transition to adulthood. Her responses became more clear and detailed. For example, for her challenges, she reported,

"I have a hard time connecting with people, whether as friends or coworkers or interviewers or other students, which makes it hard for me to maintain or create relationships or to make a good impression. My black-and-white thinking means that I need very clear and precise instructions for a task. My targeted interests means that things I am uninterested in seem boring. Executive dysfunction means that I do tasks more slowly or cannot begin a task."

Even as she reported her strengths on the post-GAQ, it was clear that she experienced an increase in self-esteem. She said, "*My focused interests mean that if I find a career that aligns with those interest, I will probably do well in it. I tend to be quiet in social situations, but I am a good listener.*" These responses appear to reflect an

improvement on the Understanding Yourself index of the GAQ following the *Epic Win* course, even though the scoring criteria suggested that Melanie remained stable on this index.

Problem solving. Throughout the course, Melanie maintained a high level of problem solving ability. Prior to the *Epic Win* course, Melanie reported a problem that involved emailing a local retail store to begin volunteering, as she was too anxious to send the email or begin volunteering. She identified a few solutions, and in the end she chose to “*procrastinate and send the email later.*” When asked would she choose the same solution again, she replied saying, “*I would probably do the same thing even though I know the consequences...I have a hard time asking for help.*” Following the *Epic Win* course, she reported a problem that involved applying for an internship at a publishing house online. The application was due the following day and she did not feel ready. Melanie listed some possible solutions, and in the end, she chose to ask her mother for help writing a cover letter. Her mother pointed out that the due date was not for another week. Melanie added, “*I would not have figured that out without my mom’s help*”. This is very impactful, as prior to the *Epic Win* course, she reported that she had difficulty asking anyone, including her mother, for help. These responses suggest a meaningful and positive shift on the problem-solving index of the GAQ following the *Epic Win* course, even though the scoring criteria suggested that Melanie decreased on this index by two points.

Self-management. Prior to the *Epic Win* course, Melanie reported that she often writes down tasks so that she will remember, and that she sometimes checks off items on her task list. Following the *Epic Win* course, she reported that she always does those

mentioned strategies. Additionally, at pre-course, she mentioned that she rarely asks for help on a task that is unclear; however, following the course, she reported that she sometimes does this. Lastly, when asked to report on what strategies she uses to get tasks done, her responses became somewhat more clear and specific. For example, on the pre-GAQ, she reported, *“I remind myself of consequences of not doing it; I try to get rid of distractions; I set alarms on my phone; and I listen to calming or motivating music.”* Following the course, she reported, *“I organize my tasks in a list according to date and priority; I set alarms to remind myself of time sensitive tasks; I keep lists on my phone so I don’t lose them; and I get rid of distractions.”* These responses reflected an increase on the self-management index following the *Epic Win* course, which is consistent with Melanie’s five-point increase in score on the Problem-Solving Index.

Mark.

Career/Work. Prior to the *Epic Win* course, Mark reported that his long-term goal in the area of work/career was to be self-employed, owning his own business that works with technology. He also stated that he would like to learn how to earn investments and learn to make money from his business. At that time, some of the actions he took consisted of starting a co-op job where he was very independent in his role. Although he did not mention this in his pre-course GAQ, Mark later told the group he was completing a high school co-op placement at a local grocery store. After the completion of the course, Mark’s goals in the area of career/work did not become clearer. He reported, *“I want to be able to start off my own business from the ground up within 3 years of finishing college, and be able to maintain and run the business successfully.”* From his goal, it is unclear as to what kind of business he wants to open; however he became more

specific in the time frame in which he wants to start his business. Mark did not report any actions taken on the post-GAQ towards achieving his goal in the area of work/career. Although these business goals remained vague, it is important to note that Mark was immediately offered a paid position at the local grocery store following his co-op placement.

Continuing Education. Mark's long-term goals in the area of continuing education at pre-course were to attend university or collage for computers and technology and to do an internship at a "*technology business*". At the time, the actions Mark took to achieve this goal involved looking into a variety of college courses, as well as "*cutting edge technologies*." At post-course, his goal to attend a post-secondary program became more specific because he stated that he wanted to attend a specific local college for a game design program the following year [September 2016]. He also mentioned that he "*wants to continue to get good grades in [high] school*." The actions Mark reported taking at pre-course were more closely related to the goal he specified; he reported that he applied and got accepted to three different college programs and was in the process of choosing the best program to join in Fall 2016. These responses reflected a meaningful increase on the Continuing Education section of the Goal and Action-Planning index of the GAQ, following the *Epic Win* course.

Independent Living. Prior to the *Epic Win* course, Mark reported multiple goals, including learning to budget and not overspend, to finance a long-term mortgage, to make money though tax rebates and loans, and to live in a large house. Although these appear to be multiple goals in the area of independence, these goals can be clustered into two goals – learning to become financially independent and owning a house. On his post-

GAQ, Mark's goals in the area of independent living did not change; the goals did not become clearer or more specific following the *Epic Win* course. He said, "*I want to be able to live on my own and take care of myself independently. I want to be successful enough to not be living paycheque to paycheque, but be able to live comfortably without worrying about money.*" At pre-course, the only thing Mark wrote under "action" related to independent living was "*[I am] good at saving money up and not recklessly spending.*" This appears to be an identified strength, rather than an action taken. At post-course, his actions became more related to his long-term goal of becoming financially independent. Mark reported that he got a part-time job and opened up a bank account with his own bankcard. Although Mark's goal did not become clearer, the actions he took became more specific and related to achieving his independence goal.

Relationships. Mark's goals in the area of relationships at pre-course included: staying in good contact with his parents and having good friends who will "*stay for life to have crazy adventures with.*" At post-course, Mark's goals expanded, as he mentioned that he wanted to keep in contact with his friends and spend time with them, maintain a good relationship with his parents, and that he wanted to be "*respected as a leader by [his] workers.*" Although Mark reported an additional goal in the area of relationships at post-course, his goals did not become any clearer as he did not specify an observable goal that was within a time frame. Rather, his goals remained more general from pre- to post-*Epic Win*. At pre-course, the only action that he reported was hanging out with friends. At post-course, Mark did not report any actions taken towards his goals in the area of Relationships.

In general, Mark's scores on his pre- and post-GAQ reflected a decrease of 6-points on his Goal and Action index of the GAQ. This drop in score did not appear to reflect Mark's ability at pre-course to take related actions towards achieving his goals. For example, in the area of Education and Independent Living, Mark took more related actions towards achieving his goals, even though his goals did not become more specific or clear.

Supports. At pre-course, Mark reported that his supports include his parents and friends. When asked how he was supported, he wrote, *"They teach me valuable lessons and help me become independent in certain areas of my life. They are always there for me, and help me when I need it the most."* When asked what supports are needed, that he does not already have, Mark reported that he did not need any other supports. At post-course, he reported that not only did his parents support him, but he also identified four other individuals; although, he did not specify who these individuals were or where they were from. He was able to identify that the people who support him do so by encouraging him, helping him realize what he wants in life, and helping him to achieve his goals. Again, he reported that he did not need any other supports. Based on the Support index scoring criteria, Mark showed an increase of two points; He was able to list more people who supported him: however, he did not become clearer as to how these individuals support him or what supports he needed but did not already have. These responses indicate that Mark perceived more people as supportive; however, he was either satisfied with supports or unable to articulate what supports were still lacking at the end of the program.

Understanding Yourself. Mark was aware of his diagnoses of Asperger's Syndrome and Tourette Syndrome at pre-course. Even before the course began, he was able to list some challenges and strengths associated with having a diagnosis of Asperger's Syndrome. Some of the challenges he mentioned included, being easily stressed and anxious. The only strength he listed included, "*I have a phenomenal memory*". Following the *Epic Win* course, Mark's responses became more clear and detailed. For example, for his challenges, he reported,

"I find it difficult and challenging to interact with others on an acceptable social level. I find it worries me to think about certain basic interactions with others. I hate change, because it stressed me out potentially. I find it's hard to interact with strangers, and the general public."

Even as he reported his strengths on the post-GAQ, it was clear that he was able to identify more strengths. He said, "*The strengths of my diagnosis are: I have an excellent memory, I am good at math and equations. I have an above average intelligence and can be very good at any subject I want to be involved with.*" These responses reflected an increase on the Understanding Yourself index of the GAQ, following the *Epic Win* course, even though the scoring criteria suggested that Mark remained stable on this index.

Problem Solving. Throughout the course, Mark maintained a moderate level of problem solving ability; however, he often found it difficult to come up with a problem that he was facing. He would tell the principle student investigator that he did not believe he had any problems to overcome. As a result, Mark left his post-GAQ Problem Solving index blank. For this reason, the principle student investigator compared his responses on

the Problem Solving index from pre-GAQ to the probe-GAQ, which took place at the midway point (week six) of the *Epic Win* course. Prior to the *Epic Win* course, Mark reported a problem in finding a co-op placement, as none of the places he applied to accepted his application. He identified two solutions, (1) to quit the co-op placement and replace it with two other credits; and (2) work at a local grocery store that was not related to his interests. In the end he chose the second solution. When asked whether he would choose the same solution again, he replied that he would. On his probe-GAQ, he reported a problem that involved completing a school assignment that was due the next day. Mark listed some possible solutions, and in the end, he chose to stay up late and complete the assignment that evening. When asked whether he would choose the same solution again, he replied that he would. Mark did not elaborate as to why he would chose the same solution again on both administrations of the GAQ, and it was unclear as to whether the chosen solution actually solved the problem. These responses did not reflect a meaningful increase on the Problem-Solving index of the GAQ, following the *Epic Win* course; however, the scoring criteria identified an increase of three points on this index.

Self-Management. Prior to the *Epic Win* course, Mark reported that he never wrote down tasks so that he would remember them, and that he sometimes rewarded himself for a job well done. He reported that he often told others when he completed a task, and that he always asked for help when a task was unclear. Following the *Epic Win* course, his responses remained the same for each of the above-mentioned strategies. When asked to report on what other strategies he used to get tasks done, his responses became less clear and less specific. For example, on the pre-GAQ, he reported, “[I] separate tasks into minor tasks, keep organized, and be efficient.” Following the course,

he simply reported, “*motivation.*” Mark’s responses on the Likert scale portion remained the same, and his responses to additional strategies that he used became less clear from pre- to post-GAQ, reflecting a decrease, on the Self-Management index following the *Epic Win* course, which is consistent with the scoring criteria that identified a two-point decrease on this index at post-course.

Teresa.

Career/Work. Prior to the *Epic Win* course, Teresa reported that her goal was to obtain a fulltime job as an educational assistant or a developmental support worker by the following September. At that time, some of the actions she took consisted of applying for some jobs and volunteering in a grade 2/3 split class. She was very specific as to what field of work she was interested, but was less specific about the kinds of jobs she applied for. After the completion of the course, Teresa’s goals in the area of career/work were similar. She reported, “*My long-term goal is to get a job in my field [special education]. In the mean time I will hopefully get a summer job...for when I finish classes at the end of the month of April.*” Her actions taken to achieve this goal were similar to before the *Epic Win* course began as she reported that she was continuing to apply for jobs within and outside of her field of interest. It appears that Teresa’s goals in the area of career/work remained consistent throughout the course, and that she was persistent in applying for jobs.

Continuing Education. Teresa’s goals in the area of continuing education at pre-course were to complete the last two courses she needed for her college program as an educational assistant/special needs support worker. At the start of *Epic Win*, she reported that she had failed these computer courses twice already. At post-course, she was closer

to achieving her goal to finish her college program, and she was hopeful that she would be graduating in June 2016. She also reported, “*I might take a photography course during the summer. I am also hoping to teach myself some sign language as well over the summer break.*” Teresa’s actions taken towards these goals were similar from pre- to post-test, as she reported that she was working towards the completion of her final two courses. At post-course, she also reported that she tried to learn sign language using a few apps, but found these unhelpful. These responses reflected a meaningful increase on the Continuing Education section of the Goal and Action-Planning index of the GAQ, following the *Epic Win* course.

Independent Living. Prior to the *Epic Win* course, Teresa reported that she wanted to move out of her mother’s house and live in an apartment alone or with a friend. On her post-GAQ, Teresa reported more goals in the area of independent living; she reported that she wanted to live in an apartment, obtain her G2 driver’s license, and buy a car once she obtained a job. Teresa’s actions taken towards achieving her independent living goals did not change from pre- to post-test. The only action she reported was applying to jobs so that she can save money to live in an apartment. These responses reflected stability on the Independent section of the Goal and Action-Planning index of the GAQ, following the *Epic Win* course.

Relationships. Teresa’s goals in the area of relationships at pre-course included: improving her relationship with her brother and maintaining a romantic relationship with her current boyfriend. On her post-GAQ, Teresa reported more goals in the area of relationships. She repeated the previous goals as well as adding making more friends, and eventually getting married and having kids. Although Teresa reported two more goals in

the area of relationships at post-course, her goals remained more general from pre- to post-*Epic Win*. Teresa's goals did not become more objective or measureable within a time frame. Additionally, Teresa's actions taken towards achieving her relationship goals remained the same from pre- to post-GAQ. Her only action taken was contacting her brother, who lived out of the country, more often via E-mail. Throughout the course, Teresa developed more goals in this area; however her goals did not become clearer or more specific at post-course, nor did she take any more actions related to her outlined goals. These responses reflected stability on the Relationships section of the Goal and Action-Planning index of the GAQ, following the *Epic Win* course.

In general, Teresa's scores on her pre- and post-GAQ reflected an increase of two-points on her Goal and Action index of the GAQ. We did not feel like this increase in score truly reflected Teresa's ability to set goals and take action on these goals, since most of her goals and actions remained stable at post-course. Instead, Teresa reported more goals in the areas of Education and Relationships at post-course, which may have contributed to the increase in scores; however, these goals were did not become more observable or measurement, and Teresa did not take more actions related to her goals within these areas. Thus, based on a qualitative evaluation of Teresa's responses, it appears that she remained stable on the Goal and Action index of the GAQ following the *Epic Win* course.

Supports. At pre-course, Teresa reported that her supports include her parents, other family members, her boyfriend, friends, and professors. She did not specify names of these individuals. When asked how she is supported, she wrote, “[by] giving encouragement as well as providing help with school classes.” When asked what

supports are needed, that she does not already have, Teresa identified that she needed more financial support, especially for her future. At post-course, she reported all of the people previously mentioned, as well as support from career centers. She was able to identify the role of the career centers as, *“these people support me by telling me places I can apply to as well as re-doing my resume and talking to the people they know at places I have applied to.”* It was evident that Teresa found supports within her community to assist her in obtaining a job, which was an extremely important goal for Taylor. When asked again what kinds of supports are needed, but that she doesn’t already have, Teresa reported that she did not need additional supports. These responses reflected a positive shift on the Support index of the GAQ, following the *Epic Win* course, as it is evident that Teresa found additional supports (i.e., career center) to aid in her search for a job, even though the scoring criteria suggested that Teresa decreased by two-points on this index at post-test.

Understanding Yourself. Teresa was aware of her diagnosis of Asperger’s Syndrome at pre-course. Even before the course began, she was able to list some challenges and strengths associated with having a diagnosis of Asperger’s Syndrome. Some of the challenges she mentioned included, getting a job and *“doing [the job] properly”*. The one strength she listed included, *“it helps me to be able to relate to the kids I will be working with one day”*. Following the *Epic Win* course, Teresa’s responses became more clear and detailed. For example, for her challenges, she reported, *“Having this diagnosis causes some challenges in transition to adulthood by making a bit harder to obtain a job and pass classes. It also makes trying to learn things quickly a bit of a challenge as well.”* Even as she reported her strengths on the post-GAQ, it was clear that

she was able to identify more strengths. She said, “*Having this diagnosis gives me strengths that will help me in transition to adulthood is that it makes me work harder for what I want. It also makes me more relatable to the children I will be working with in the future.*” Teresa was aware of some of the challenges of having Asperger’s Syndrome for her, and she was able to recognize the need for her to work harder in order for her to obtain her goals. These responses reflected an increase on the Understanding Yourself index of the GAQ, following the *Epic Win* course, even though the scoring criteria suggested that Teresa remained stable on this index at post-test.

Problem solving. Throughout the course, Teresa maintained a high level of problem solving ability. Prior to the *Epic Win* course, Teresa reported a problem that involved finding a job that did not involve a math component, as she reported that she is not good at math. She identified a few solutions, and in the end she chose to “*apply for jobs in my field.*” As mentioned earlier, Teresa’s field of interest was special education. Teresa’s response was not clearly articulated, however the principle student investigator was able to help her to articulate her response. She was able to recognize that she did not necessarily need to be good at math in order to work as a special needs support worker or educational assistant. When asked would she choose the same solution again, she replied that she would. Following the *Epic Win* course, she reported a problem that involved saving money. She recognized that whenever she had money with her, she spent it right away. Teresa listed some possible solutions, and in the end, she chose to open up a bank account that she did not have access to, in order to save her money. Teresa’s description of her problem and possible solutions were more detailed and clearer than her responses on her pre-GAQ. These responses reflected a meaningful increase on the Problem-

Solving index of the GAQ, following the *Epic Win* course, even though the scoring criteria suggested that Teresa decreased by one-point on this index at post-test.

Self-management. Prior to the *Epic Win* course, Teresa reported that she often wrote down tasks so that she would remember them, and that she sometimes checked off the tasks she had completed. Teresa reported that she sometimes rewarded herself for a job well done. She indicated that she often told others when she completed a task, and that she often asked for help when a task was unclear. Following the *Epic Win* course, her responses remained the same for each of the above-mentioned strategies, except she reported that she never rewarded herself for a job well done once she had completed a task. Lastly, when asked to report on what strategies she uses to get tasks done, her pre-GAQ, response was “*I have a day by day to-do chart as well as using a day planner book*” Following the course, she reported, “*[I] have my mother remind me or have someone else remind me. [I] set an alarm on phone to remind me to do things.*” These responses were similar from pre- to post-GAQ; however, her post-GAQ response indicated that she was doing less self-monitoring of her own behavior and she was relying more on others to remind her of her tasks, reflecting a decrease on the Self-Management index following the *Epic Win* course, which is consistent with the scoring criteria, which outlined that Teresa decreased on this index at post-test by one-point.

Kevin.

Career/Work. Prior to the *Epic Win* course, Kevin reported that his long-term goal in the area of work/career was to become a video game designer or a cook. At that time, he took two actions relating to his goal of becoming a video game designer; he researched about video game design and purchased video game design software on his

computer. After the completion of the course, Kevin's goals in the area of career/work remained stable as he still wanted to become a video game designer. On his post-GAQ, Kevin reported that he was designing his own video game using the software he purchased. Kevin was focused on learning video game design throughout the course and he was very proud of his progress. These responses reflected stability on the Career/Work section of the Goal and Action-Planning index of the GAQ, following the *Epic Win* course.

Continuing Education. Kevin's long-term goals in the area of continuing education at pre-course were to attend collage. Kevin did not specify a program he was interested in, nor did he report any actions taken towards achieving this goal prior to the *Epic Win* course. At post-course, his goal to attend a post-secondary program became more specific because he stated that he wanted to attend a specific local college (name not provided to protect the participant's privacy) for a video game design program. Kevin reported that he was completing high school as an action taken towards achieving his goal. These responses reflected a meaningful increase on the Continuing Education section of the Goal and Action-Planning index of the GAQ, following the *Epic Win* course.

Independent Living. Kevin's goal in the area of independent living did not change from pre- to post-GAQ. The only goal Kevin reported was that he wanted to own his own apartment. His goal did not become more specific or clearer following the *Epic Win* course. Prior to the *Epic Win* course, Kevin did not report any actions taken towards achieving his goal. At post-*Epic Win* course, he reported that he was looking for a job. It was unclear as to the relatedness of this action towards his goal; however, it can be

inferred that he wanted to get a job in order to afford an apartment. These responses reflected stability on the Independent Living section of the Goal and Action-Planning index of the GAQ, following the *Epic Win* course.

Relationships. Kevin's goal in the area of relationships did not change from pre- to post-GAQ. The only goal Kevin reported was that he wanted find a girlfriend and eventually get married. His goal did not become more specific or clearer following the *Epic Win* course. Kevin did not report any actions talking in the area of relationships before and after the *Epic Win* course. These responses reflected stability on the Relationships section of the Goal and Action-Planning index of the GAQ, following the *Epic Win* course.

In general, Kevin's scores on his pre- and post-GAQ reflected no change from his Goal and Action index of the GAQ. We felt that this reflected Kevin's ability to write clear goals and take related actions towards achieving those goals because most of his goals did not change, nor did he take more actions related to his goals at post-test. Kevin's goal in the area of Education became slightly clearer, as he was able to identify the college that he was interested in applying to following high school.

Supports. At pre-course, Kevin reported that his supports includes, "*Dad, Uncle, Aunt, Cousins, Dad's friend*" When asked how he is supported, he wrote that they provided "*moral support and assistance.*" When asked what supports are needed, that he does not already have, Kevin reported the move mentioned individuals, as well as his teachers; although, he did not report the names of these individuals. At post-course, he was able to identify that the people who support him do "*emotionally.*" Again, he reported that he did not need any other supports. It was evident that Kevin's Support

index remained the same following *Epic Win* course and since he did not provide detailed information about the kinds of supports he has or that he needs, it is likely that Kevin remained unaware of the kinds of supports he needs when transitioning to adulthood. This was consistent with the scoring of Kevin's GAQ at post-course on this index.

Understanding Yourself. Kevin was aware of his diagnoses of Asperger's Syndrome. Kevin was not able to identify any challenges associated with having a diagnosis of Asperger's Syndrome during this transition to adulthood period from pre- to post-*Epic Win* course. The only strength he listed included, "*amazing skill in the areas of technology*" or other specific area on his pre- and post-GAQ. These responses reflected no change on the Understanding Yourself index of the GAQ, following the *Epic Win* course. This was consistent with the scoring of Kevin's GAQ at post-course on this index.

Problem Solving. Kevin often found it difficult to come up with a problem that he was facing. He would often tell this investigator that he did not believe he had any problems to overcome. As a result, Kevin left his pre-GAQ Problem Solving index blank. For this reason, the principle student investigator compared his responses on the Problem Solving index from his probe-GAQ, which took place at the midway point (week six) of the *Epic Win* course, and his post-GAQ. On his probe-GAQ, Kevin reported a problem that involved finding a job, as he reported that he was lazy and had lost his resume. He identified three solutions, (1) apply for jobs online; (2) update his resume; and (3) apply for jobs in person. In the end he chose solution 2. When asked whether he would choose the same solution again, he replied that he would. On his post-GAQ, he reported the same problem. This time, he reported that he applied for jobs online. When asked whether he

would choose the same solution again, he replied that he would. It is not clear as to whether his solution was solved, nor did Kevin develop new solutions in order to motivate himself to apply for jobs. These responses reflected no change on the Problem-Solving index of the GAQ, following the *Epic Win* course, which is consistent with Kevin's one-point decrease at post-test on this index.

Self-Management. Prior to the *Epic Win* course, Kevin reported that he sometimes wrote down tasks so that he would remember, and that he rarely checked off tasks from a list once they were complete. He often rewarded himself for a job well done. He reported that he always told others when he completed a task, and that he often asked for help when a task was unclear. Following the *Epic Win* course, his frequency of using the above mention strategies reduced. Kevin reported that he rarely writes down tasks or checks off a task once it is complete. He reported that he often rewarded himself for a job well done, often told others when he completed a task, and often asked for help when a task is unclear. When asked on his pre-GAQ to report on what other strategies he used to get tasks done, he reported the he takes breaks and short walks. At post-course, he did not report the use of any additional strategies. Kevin's responses reflected a decrease on the Self-Management index following the *Epic Win* course, which is consistent with the scoring of Kevin's GAQ because he decreased by seven-points on this index at post-test.

Kayla

Career/Work. Prior to the *Epic Win* course, Kayla reported she was unclear what her long-term career goals were. She reported that she wanted to obtain a voluntary or temporary paid position; however, she was not clear as to what kind of work she was looking into. At that time, she applied to volunteer at a local Humane Society. After the

completion of the course, Kayla's goals in the area of career/work became clearer, as she indicated that she was interested in working for the Ministry of Natural Resources and Forestry, her Aboriginal community band, or for a mining company. It was clear that Kayla wanted to work with natural resources. As a short-term goal, Kayla reported that she wanted a part-time job and she completed WHIMIS and Smart Serve trainings as actions towards obtaining a part-time job. These responses reflected a meaningful increase on the Work/Career section of the Goal and Action-Planning index of the GAQ, following the *Epic Win* course.

Continuing Education. Kayla's long-term goal in the area of continuing education remained consistent from pre- to post-GAQ. Her goal was to complete a college program. Prior to the *Epic Win* course, Kaya was enrolled in a college program that was far from her parents' home and she lived on campus during the first year of her program. Kayla was not able to continue with her studies and she moved back home after a year because she failed all her courses. She was disappointed in herself, and her main goal remained consistent. Initially, Kayla wanted to return to the college that she was attending; however, by the end of the course, Kayla decided to apply for local college programs, so that she would continue to be supported by her parents. Although Kayla's goal remained the same, she was able to make realistic choices that would support her in moving towards her goals. These responses reflected a meaningful increase on the Continuing Education section of the Goal and Action-Planning index of the GAQ, following the *Epic Win* course.

Independent Living. Kayla's long-term goal in the area of independent living did not change from pre- to post-GAQ. Kayla reported was that she wanted to own a house in

the forest, up north near her Aboriginal reserve. Her goal did not become more specific or clearer following the *Epic Win* course. Prior to the *Epic Win* course, Kayla did not report any actions taken towards achieving her goal. At post-*Epic Win* course, she reported a short-term goal of obtaining her driver's license. At that time, she had attempted her second road test and was unsuccessful. It was unclear as to the relatedness of this action towards her long-term goal of owning a house by the forest; however, it can be inferred that she was working towards a secondary goal in the area of independence (i.e., driving) at the end of the course. These responses reflected stability on the Independent Living section of the Goal and Action-Planning index of the GAQ, following the *Epic Win* course.

Relationships. Kayla's goal in the area of relationships did not change from pre- to post-GAQ. The only goal Kayla reported was that she wanted to have a small group of friends. Her goal did not become more specific or clearer following the *Epic Win* course. Kayla did not report any actions taken in the area of relationships before the *Epic Win* course; however, after the *Epic Win* course, Kayla was in action towards achieving this goal because she communicated with some of the people she knows via Facebook Messenger. It was clear that Kayla's goals related to relationships did not change; however, by the end of the course, she was taking actions towards achieving her goal.

In general, Kayla's scores on her pre- and post-GAQ reflected an increase of eight-points on the Goal and Action index of the GAQ. We felt that this accurately reflected Kayla's ability to write clear goals and take related actions towards achieving those goals because most of her goals became clearer, and she took more actions related to her goals at post-test.

Supports. At pre-course, Kayla reported that her supports included, her parents and grandparents. When asked how she was supported, she wrote that, *“they encourage me and help me get things done when they can.”* When asked what supports are needed, that she does not already have, Kayla did not report. At post-course, Kayla reported that her supports included, her parents and grandparents, as well as her Aboriginal band council; however, she did not identify how these people support her. Additionally, she reported that she will need assistance at the school that she will attend. It was evident that Kayla’s Support index remained the same following *Epic Win* course as she was unable to provide any more detail about the kind of supports she has or that she needs when transitioning to adulthood. This was consistent with the scoring of Kayla’s GAQ, because there was no change in her scores at post-test on this index.

Understanding Yourself. Kayla was aware of her diagnosis of Asperger’s Syndrome. At pre-course, Kayla was able to identify challenges, but not strengths, associated with her diagnosis. She said, *“I have trouble interacting with others, staying focused and completing tasks in a timely manor. I have trouble getting things started and finishing them, I’ll lose interest and forget about tasks.”* At post-*Epic Win*, Kayla identified all the same challenges associated with a diagnosis of Asperger’s Syndrome; however, she was also able to identify one strength. She said, *“The strengths are that when I am interested my focus can be hard to shake.”* Although these post-course responses reflected a minor increase on the Understanding Yourself index of the GAQ, it seemed clinically significant that she could now see something positive about herself that she associated with having Asperger’s Syndrome, even though the scoring criteria suggested that Kayla decreased by one-point on this index at post-test.

Problem Solving. Kayla she often found it difficult to come up with a problem that she was facing. As a result, Kayla left her pre- and probe-GAQ Problem Solving indices blank. For this reason, the principle student investigator could not compare Kayla's post-GAQ Problem Solving Index to any other administration. The fact that, only at post-course, could she identify a problem to solve was, in itself, meaningful, given a long-standing tendency to avoid dealing with problems (as reported by her mother during the course). On her post-GAQ, Kayla reported a problem that involved following up on her job applications so as to get an interview. She identified three solutions, (1) call the manager; (2) send an email; and (3) do nothing. Kayla was also able to come up with pros and cons for each possible solution. When asked to report which solution she chose, Kayla said, "*I am still working on the solution.*" Although Kayla was able to identify possible solutions to her problem, she could not choose what action to take. No inferences can be made about improvements on the Problem Solving Index of the post-course GAQ, other than to suggest that Kayla appears to be one step closer to taking action in the face of barriers to success.

Self-Management. Prior to the *Epic Win* course, Kaya reported rarely ever using self-management strategies to help her complete tasks. Following the *Epic Win* course, her frequency of using these strategies increased. Kayla reported that she sometimes writes down tasks or checks off a task once it is complete. She reported that she often rewards herself for a job well done, often tells others when she completes a task, and often asks for help when a task is unclear. When asked to report on what other strategies she uses to get tasks done on her post-GAQ, she reported that, "*I put the important things on a calendar and attempt to complete most tasks as soon as I receive them.*" Kayla's

responses reflected an increase on the Self-Management index following the *Epic Win* course, which is consistent with the scoring of her GAQ, as she obtained a six-point increase at post-test.

Homework Completion and GAQ Scores

The intention for tracking homework completion during the *Epic Win* course was to correlate the amount of homework completion with measures of self-determination. It was hypothesized that those who completed the most homework would have higher scores on the GAQ for increased self-determination and self-determined behaviours. However, due to our small sample size and low reliabilities and wide standard deviations on the GAQ, it was not possible to correlate homework completion with GAQ scores. Instead, we decided to conduct a visual comparison of the percentage of homework completion to the percentage of gains made on the GAQ.

Refer to Figure 2 for a graphical display of the percentage of homework completion for each of the participants. Overall, three out of the five participants (Melanie, Mark, and Teresa) completed most of their homework assignments (87-90%) throughout the course. Kevin completed 68% of his homework and Kayla completed 35% of her homework. When homework completion was compared to the percentage of GAQ outcomes that showed a score increase from pre- to post course, no relationship emerged. Only Melanie had a high rate of homework completion and only a minimal increase on the GAQ (across two of the five GAQ outcome measures = 40%). Mark and Teresa, who both had high rates of homework completion, had much lower percentages of increases on the GAQ outcome measures (40% and 20%, respectively). Kevin, who had a moderate rate of homework completion (68%), had no increases on any of the GAQ

measures (0%). Finally, Kayla who had the lowest rate of homework completion (35%) showed a moderate number of increases on the GAQ (50%). It appears, based on this small sample, that there is no relationship between higher rates of homework assignments completed throughout the course and participants' scores on the GAQ.

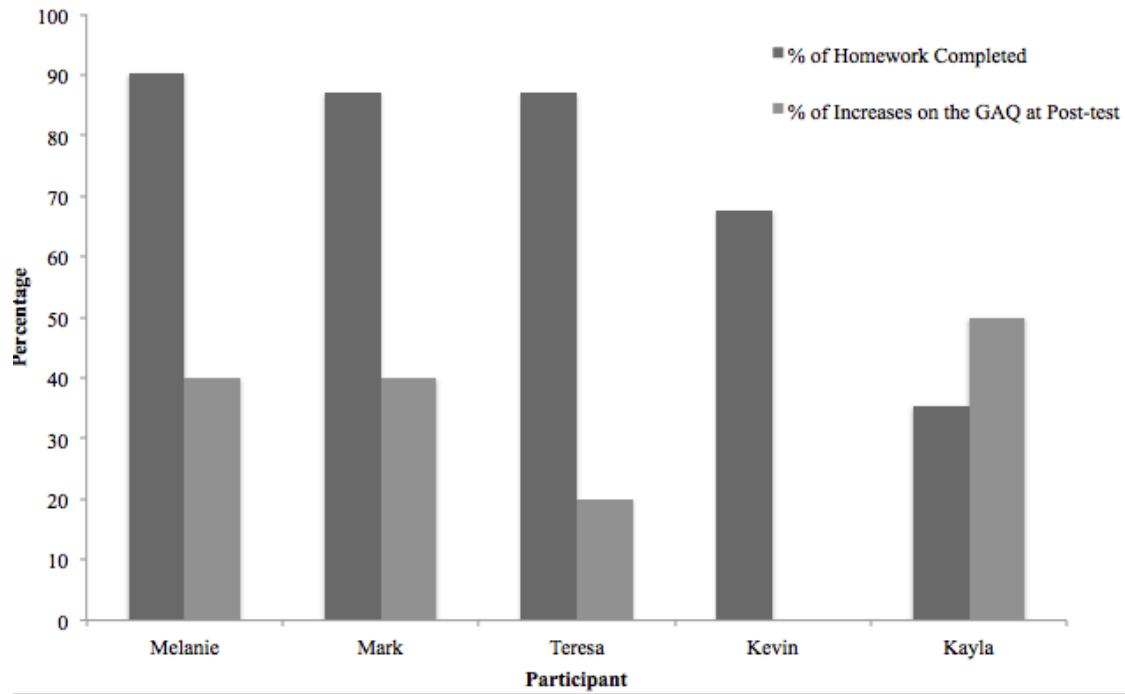


Figure 2. Percentage of homework completion during the *Epic Win* course for each participant, compared with percentage on GAQ items showing increase in scoring.

CHAPTER 4

Discussion

The purpose of this Master's thesis was to evaluate the effectiveness of the enhanced *My Life as an Epic Win* course on the self-determined behaviours of five young adults with HFASD. This study sought to evaluate the self-determined behaviours of these participants on two measures of self-determination. Using a comparative case study design involving descriptive and qualitative analyses, this MA thesis explored the impact of the *Epic Win* course on self-determination using the AIR-SDS and on self-determined behaviours using the GAQ.

All three participants who completed the AIR-SDS at pre- and post-course demonstrated an increase in total self-determination score; however, none of these changes were statistically significant using the RCI, a non-parametric tool for assessing individual difference on pre-and post-intervention scores. For the three participants for whom we had complete pre-post scores on this measure, there was large variance between these three participants and, with such a small sample size, parametric analysis was not appropriate. It is important to note that two out of these three participants (Melanie and Teresa) made relatively large gains (i.e. 10 points in self determination), which were greater than the gains found on the same measure in Wehmeyer and colleagues' (2011) study. In that study which evaluated the effectiveness of a curriculum to teach self-determination, they involved 493 students in special education classrooms, and measured self-determination using both the Arc Self-Determination Scale and the AIR-SDS. Given this large sample size, the researchers were able to utilize traditional parametric statistics, and it was observed that three to five point increases on the AIR-

SDS resulted in statistically significant improvements in self-determination. Based on their results, we can speculate that, across a larger sample, if we were to maintain consistent increases on the AIR-SDS within the 8-10 point range, we would have significant pre-post course differences. We speculate that Kayla's 2-point increase on the AIR-SDS at post-course may not yield statistical significance in a larger sample size.

The results obtained from the qualitative analysis of the GAQ provide valuable information about the self-determined behaviours of the five participants in this study. At pre-test, all five participants had some idea as to what they wanted for their future in the areas of work/ career, education, independence and relationships. The participants were able to express these goals in writing and listed some of the actions that they had taken in the past month to help them move closer to achieving their goals. Their goals appeared to be consistent with those of same aged peers (e.g., all of the participants were concerned about competing post-secondary education within their area of interest for careers). At post course, two out of the five participants (Melanie and Kayla) were able to report clearer and more specific goals in the four areas of life, and had taken more related actions toward achieving these goals, as per the scoring criteria of the GAQ. In the area of work/career, Melanie and Kayla had developed clearer and more specific goals at post course, and Mark had more actions taken at post course. Kevin and Teresa remained stable in terms of the clarity of their goals and the relatedness of the actions taken. It can be inferred that since participants were discussing long-term goals in the four areas of life, it is understandable that their goals may not have changed; however, following training, it was intended that their goals might become more specific and clear. Given the open-endedness of the GAQ instructions ("What are some of your long-term goals in the

each of the four areas below (work/career, education, independence, and relationships)?”), it makes sense that participants were providing general responses for their goals (e.g., “I want to own my own business”, “I want to work with technology”, “I want a summer job”, etc.). In the future, we would want to improve the specificity of the wording on the GAQ to elicit clearer responses.

With regard to perceived support, only two out of the five participants demonstrated an increase on the Support index of the GAQ at post-test; suggesting participants were not aware of what supports they required, or that their stable responses reflected a perception of being sufficiently supported. Perhaps the GAQ should be supplemented with a pre- and post-course interview to clarify participants’ responses on the GAQ.

On the Understanding Yourself index of the GAQ, none of the participants demonstrated an increase in their awareness of how their diagnosis of Asperger’s Syndrome affects their transition to adulthood, as per the scoring of the participants’ GAQs. However, based on a qualitative analysis of the participants’ responses, four out of the five participants (excluding Kevin) appeared to have made gains on this index of the GAQ. Participants became clearer in their responses as to how the challenges they experienced impeded or could impede their ability to find work or build friendships. More importantly, at post-course, all five participants were able to identify more strengths related to their diagnosis and three demonstrated decreases in the number of limitations listed. Although four out of the five participants increased in scores on this index at post-test, one participant, Kevin, did not report any challenges associated with his diagnosis at pre- and post-test. As well, at pre-test he did not identify any strengths

associated with his diagnosis; however, he was able to identify one strength at post-test. Overall, there was an increase in the participants' responses on the Understanding Yourself Index of the GAQ, as all five participants were able to identify more strengths associated with their diagnosis that might aid in their transition to adulthood. From this result, we can postulate that there are benefits for individuals with HFASD to be coached on positively re-framing what their diagnosis means to them, and how having HFASD may benefit them in their transition to adulthood.

Based on the participants' responses on the Problem-Solving Index of the GAQ, it is unclear whether any improvements were made in problem-solving ability as three out of five participants left this section blank on at least one administration of the GAQ (Mark left his post-test Problem-Solving index blank and Kevin and Kayla left their pre-test Problem Solving indices blank). For the two participants that completed this section on both pre- and post-test, their problem-solving ability appeared to decrease (Melanie by two points and Teresa by one point); given that these decreases were small and that a qualitative analysis suggested that these participants actually improved their problem-solving ability, we concluded that the participants maintained a stable level of problem solving ability from pre- to post-test. During the administration of the GAQ, participants were told to "answer the questions to the best of your ability", and that they were not obliged to complete all of the questions. Given this, in future administrations of the GAQ, wording could be changed to encourage more complete responding (e.g., "please be sure to complete each of the sections and if you are unsure of what to write, one of the facilitators can provide guidance"); as well, it would be important to have a facilitator review the GAQ at completion and, if a question was left blank, the facilitator could

assist the participants, through non-directive questioning, with identifying a problem they are facing that could be analyzed (e.g., “Have you dealt with any problem at home, school or in the community in the last month that may or may not have been resolved?”). In addition, this section of the GAQ could include sample problems that individuals with or without HFASD may face, so that they have an option to solve the sample problem if they are unable or unwilling to identify their own problem. For their own reported problems, all five participants were able to identify a minimum of two solutions, along with pros and cons to each solution. Participants showed adequate ability to choose an acceptable solution for their problems. Given that we have no normative data on problem solving, we are unable to compare the participants’ ability to problem solve to that of a neurotypical population. Future research would need to validate the GAQ with both individuals with HFASD and those who are neurotypical.

Lastly, there was variability among the participants on the Self-management index of the GAQ. It appeared that two out of the five participants (Melanie and Kayla) made gains on reported use of self-management strategies related to completing tasks, while the other three participants decreased on the Self-management index of the GAQ. It is unlikely that participants actually decreased in self-management skills, but rather that the decrease was an artifact of the GAQ as a pre-post measurement tool. Future use of the GAQ would require improvements to how the self-management questions are asked. Instead of, or in addition to, including Likert scale questions, we could leave space for participants to give examples as to how they utilized self-management strategies. For example, a question could be added, “When you have a task to complete, how are you able to remember to do this task?” Alternately, behavioural observations by parents of

participants while engaging in self-management behaviours would provide a more objective measure (see Future Directions section).

Based on qualitative analysis of the GAQ, it appears that all five participants made some gains in self-determined behaviours, especially in the self-awareness of their diagnosis of HFASD. Although no conclusions can be made as to the causality of this increase (due to the absence of a control group), it appears as though all five participants viewed themselves and their diagnosis in a qualitatively different way, that their goals became more specific and clear, and that they took more actions related to achieving their goals. These findings are consistent with the increase in self-determination on the AIR-SDS for the three participants who completed pre-post course questionnaires, suggesting positive trends towards an increase in self-determined behaviours following the administration of the *Epic Win* course.

The quantitative and qualitative analysis used in this MA thesis provided support for future research on the *Epic Win* course. This pilot study on the 12-week course *Epic Win* course demonstrated positive trends in self-determination and self-determined behaviours among five young adults with HFASD. These results suggest that, through continued delivery of the *Epic Win* course using consistent protocols for delivery and evaluation over a larger sample size of at least 20-30 participants (possibly 3-4 more deliveries of the course), future research could demonstrate the effectiveness of this course in increasing participant' self-determination and self-determined behaviours.

Strengths of this Study

This study provided preliminary evidence that participants of the *Epic Win* course made non-significant gains towards an increase in self-determination after 12-weeks.

There were various strengths that should be noted. Firstly, this was the first iteration of the *Epic Win* course that administered structured screening measures. Prior to this study, participants were recruited if their parents reported a diagnosis of Asperger's Syndrome or ASD; however, participants were not screening for intelligence or ASD symptomology. Screening for IQ and diagnosis was important to our ability to make statements about the effectiveness of this training for this particular HFASD population. Secondly, the decision to extend the course to 12-weeks appeared beneficial as it gave participants greater opportunity for rehearsal and role play of the self-determined behaviours being taught in the course. Thirdly, during the course delivery, we were refining each of the weekly session notes in preparation for manualization of the curriculum. Moving forward, a manual is now available that will be used for the administration of the upcoming *Epic Win* courses. This will be useful in order to establish and evaluate treatment fidelity for the facilitators who will be administering the course in the future. Lastly and most importantly, the evaluation of this transition to adulthood course is the first of its kind; currently, there are no programs aimed at teaching self-determination to individuals with HFASD during this transitional period within Ontario. Additionally, there is no published research evaluating a transitional course teaching self-determination for this population. It is critical that this novel course continue to be evaluated for its effectiveness with larger samples of individuals with HFASD in order to disseminate this research and produce meaningful assistance for this population as they transition into adulthood.

Limitations of this Study

Although the current study provided evidence for general trends towards an increase in self-determined behaviours following the *Epic Win* course, the current study is not without limitations. Firstly, a small sample size was utilized for this study. The principle student investigator and Dr. Ward intended to run two *Epic Win* courses simultaneously, each with six to eight participants, resulting in a total of 12-16 participants for this study. Unfortunately, due to difficulties with timely recruiting of individuals with HFASD who met our eligibility criteria, we were unable to obtain a larger sample size; thus, the final sample size of five participants. Because of the small sample size, traditional parametric analyses could not be conducted. As a result, we were not able to evaluate the group's performance on measures of self-determination; no conclusions about the effectiveness of the *Epic Win* for a group can be drawn, despite the positive trends in self-determined behaviours for our five participants.

Our small sample size created a poor statistical framework. In a small sample size, an outlier could drastically affect the standard deviation of a group. When a standard deviation is large, it indicates that variance is large within the sample and the standard error increases, meaning that there is more random error within the statistical model. Additionally, reliability calculations and the RCI estimates were impacted by the large standard deviation on the AIR-SDS. In addition, since the RCI measured change on an individual level, it is not possible to make any inferences about the group's performance. Based on these complications, it is clear that the RCI calculations were not useful in measuring change to the individual's self-determination scores on the AIR-SDS.

Along with the poor statistical framework and the already small sample size, we were missing complete data sets for the AIR-SDS. This measure was not available for Mark and Kevin prior to the course, due to loss of one protocol and failure to collect the data for the other participant. Although we were not able to measure change on self-determination for these two participants, these missing data did not implicate the results, as the AIR-SDS was analyzed for each participant individually.

With regard to the “representativeness” of this sample, four of the five participants in this group had very high overall IQ scores (almost one standard deviation about the mean of the general population). Based on informal comparison with past *Epic Win* cohorts, this may not be a representative sample for a population of individuals with HFASD or Asperger’s Syndrome. Although intelligence was not formally tested in other cohorts, Dr. Ward observed much more variability in cognitive functioning across previous groups. It is unclear whether any improvements on self-determination or self-determined behaviours were due to the *Epic Win* course, or whether they were based on the participants’ exceptional IQs. Additionally, results of this study may not be generalizable to a similar population of individuals with HFASD. This limitation did not have an impact on the results of this study since there were no group comparisons made; however, it is likely that future iterations of the *Epic Win* course will have greater variability in mean IQ.

Another limitation of the current study relates to the tool created by the research team to measure self-determined behaviour. The GAQ was never formally evaluated for validity or reliability among an independent sample of similar individuals with HFASD. Because there was no formal assessment of convergent or divergent validity conducted, it

is unclear whether this tool was actually measuring self-determined behaviours. As well, it was intended that the RCI statistic could be used to compare individual change scores for pre-post-course GAQ total scores; however, given that the GAQ was developed specifically for this study, it did not have any published estimate of reliability. As well, our attempt to evaluate the GAQ for test-retest reliability using a simple Pearson Product Moment correlation (see Table 2) was not appropriate. Reliability of this measure would have to be established with a sample from the same population, but outside of the sample used for this study. Until we do this, we cannot know the reliability of this measure. Furthermore, the descriptive analysis of the GAQ suggested that there were very wide standard deviations and low test-retest reliability on the five indices, making the use of the RCI statistic inappropriate for evaluation of the GAQ. This left us with a qualitative analysis of the pre- and post-GAQ scores and their differences. Therefore, any interpretation of the GAQ for these five individuals is purely subjective and speculative.

As well, the scoring rubric developed for the GAQ (Appendix H) was not without limitations. It was intended that the participants written responses could be scored based on the clarity and relatedness of their responses; however, it became clear that the scoring criteria did not consistently reflect meaningful changes on the participants' GAQ when compared to a qualitative analysis of the responses. For example, on the Goal and Action index of the GAQ, participants were able to write as many goals down as they wanted to for each of the four areas of life. Due to this, participants were given points based on number and clarity of each goal reported. Thus, if a participant reported three goals at pre-test, and only one goal at post-test, this would reflect a decrease in score, regardless of whether the individual's goal at post-test became more clear or specific. There was no

ceiling on this index of the GAQ, since participants were able to report as many goals as they wanted. Thus, we do not believe that the scoring criteria used for analysis of the GAQ accurately measured change in the participants' ability to set goals or take actions. Instead, a qualitative interpretation of the participants' responses appeared somewhat more beneficial in describing changes in responses, compared to the numerical scores. Future research would need to look at a more meaningful rubric for scoring the GAQ.

In addition, it became evident while analyzing the GAQ that some of the participants responded vaguely on some of the questions. It would have been helpful if we were able to ask the participants follow-up questions. For example, on the Problem Solving index of the GAQ, Mark and Kevin were not clear as to whether the solutions they chose for their problem actually solved the problem. A pre-post interview should be conducted to supplement the GAQ in order to clarify any answers that were unclear. If we were able to ask these participants for clarification, we may have been able to gather more useful information regarding gains made on these self-determined behaviours.

Future Directions

Future research may want to consider adding pre-screening of participants on executive functioning (EF) so as to consider how these capacities might impact on the participants' ability to acquire self-determined behaviours. This is because, individuals with ASD have historically been evaluated as having lower executive functioning, which may directly impede an individual's ability to learn self-determined behaviours. A measure of EF such as the Behavior Rating Inventory of Executive Function (BRIEF; Gioia, Isquith, Guy, & Kenworthy, 2000) could help the researchers to understand individual differences in motivation, social and communication challenges, and repetitive

and restrictive behaviours commonly experienced by individuals with ASD (Kenworthy, Yerys, Anthony, & Wallace, 2008). For example, indices of lower levels of executive functioning at pre-course may be correlated with low levels of ability to set goals and remain in action around those goals. If participants were evaluated for executive functioning prior to the course, the facilitators would be aware of those participants who may require more individualized assistance within the course to acquire self-determined behaviours.

Research on the effectiveness of the *Epic Win* course provides a new contribution to the literature on transition to adulthood and self-determination in an HFASD population. As such, the current study was able to provide some preliminary pilot data addressing the effectiveness of the course and its potential impact on self-determination. The *Epic Win* course requires continued evaluation through future research. Firstly, the course needs to be evaluated within a larger sample size, in order for traditional parametric statistics to be utilized. By combining the results of several *Epic Win* groups over time (potentially, 3 to 4 more groups) using the curriculum manual to control for treatment fidelity, a larger sample could then be analyzed. By increasing the statistical power, we would be able to truly evaluate the effectiveness of the course for a group of young adults with HFASD. From these results, we would be able to make inferences about applying this transitional course to a larger population with similar demographics as those in this study. Once a sufficient number of *Epic Win* cohorts have been evaluated, assuming similar positive trends, a randomized control trial (RCT) should be conducted. The most valuable way to measure whether the course is effective would be to compare an experimental group who receives the course, with a randomly assigned waitlist control

group who does not receive the course until after comparison with the experimental group (i.e., a waitlist control group).

Additionally, prior to any further use of this tool, it is imperative that a validation study with the GAQ be conducted in order to determine whether this questionnaire is an accurate measure of self-determined behaviours. In the future, we intend to complete a validation study for the GAQ. By administering this questionnaire to individuals with similar demographics as the participants in this study we would be able to: (1) ensure that the tools are at a reading comprehension level that is appropriate for use with this population, and (2) provide some initial validation of the GAQ, looking for convergent validity using standardized tools that evaluate self-determination (e.g., AIR-SDS) and divergent validity with standardized tools that evaluate other constructs that we would not expect to be related to self-determination (e.g., anxiety or depression tools). From this validation study, it would be important to refine the GAQ and the scoring rubric, with the plan to make the tool less subjective for a qualitative analysis.

In addition to the indirect measure of self-determined behaviour as measured by the GAQ, it would be important to develop a direct outcome measure that is more behavioural, ideally to objectively measure and observe changes in self-determined behaviour in participants. For example, to evaluate goals and actions taken, participants could be required to bring in some form of a permanent product, or evidence, that they achieved their goal. As well, participants could be encouraged to write at least one goal within each of the four areas of life, that they should work towards achieving during the course. One direct measure of self-determined behaviour could evaluate whether participants actually took appropriate and sufficient actions to achieve the four goals they

set early on in the course. In addition, during the weekly sessions, facilitators could target scenarios that would elicit self-determined behaviours and collect data on participants' ability to use of target behaviours being taught in that or previous weeks. These opportunities to directly observe acquisition and generalization of self-determined behaviours would be very useful in evaluating the effectiveness of the *Epic Win* course.

As previously suggested, a pre-and post-course interview should be conducted following administration of the GAQ in order to clarify any unclear responses.. This supplemental interview will help future researchers gather more meaningful information regarding participants' self-determined behaviours before and after the *Epic Win* course.

If the *Epic Win* course is found to be an effective transitional program, the next steps will be to adapt the program so that can be evaluated more broadly, perhaps in high schools and within support programs for older adolescents and young adults with HFASD. We hope to spark the interest of educators and agencies that would be willing to use and evaluate the *Epic Win* manual in their settings. The researchers would provide training, ongoing oversight of course delivery, data collection and data analysis. Additionally, by involving others in assessing the effectiveness of the course within their settings, this would contribute to a broader assessment of intervention effectiveness.

Assuming the *Epic Win* curriculum is found to be effective, individual components of the curriculum could be evaluated. Since the *Epic Win* is a comprehensive multi-component curriculum, it would be difficult to say exactly what aspects of the course are responsible for an increase in self-determined behaviours. Future research on the *Epic Win* curriculum should focus on conducting a component analysis with a similar population. Though this component analysis, effective and ineffective aspects of the

curriculum can be identified, and future iterations of the course would emphasize the effective components. Two possible components worth analyzing are (1) concurrent parent training, and (2) role-play and rehearsal within problem solving.

Another important consideration for future research would be to evaluate the long-term effectiveness of the *Epic Win* course. Conducting follow up with participants of the *Epic Win* course would allow us to evaluate the impact of the course on their transition to adulthood. We could set up a phone or in-person interview with the participants, asking them questions in relation to the goals that they set in the course, the actions that they have taken since the end of the course, any problems they have run into, and how they have (or have not) found the course material and strategies helpful with their transition. It may be useful to collect this follow-up data six months and 12 months after completing the *Epic Win* course. By systematically following-up with the participants after they complete the course, future researchers would be able to evaluate whether skills taught within the course (i.e., self-determined behaviour) were maintained and generalized to different environments and domains within the participants' lives, and whether course outcomes correlated with other expected outcomes (e.g., getting and keeping a job, succeeding in college and university, making and keeping friends, developing independence to live outside the family home, etc.).

Conclusions

Individuals with HFASD are facing significant challenges transitioning out of high school and into adulthood (Friedman, Warfield, & Parish, 2013; Taylor & Seltzer, 2011; Wehman, Schall, Carr, Targett, West, & Cifu, 2014). The *My Life as an Epic Win* was adapted based on the self-determination model to teach individuals with HFASD

acquisition of self-determined behaviours (i.e., goal setting and action planning, self-awareness of supports and strengths and weaknesses, problem solving, and self-management). The *Epic Win* course was administered to five participants with HFASD. All participants with complete data sets demonstrated an increase in self-determination based on the AIR-SDS; although there were 2 to 10 point differences, these gains were not significant on a statistical level. Based on the GAQ, it appeared that completion of the *Epic Win* course also led to positive changes in the way participants viewed themselves, as well as in their ability to develop clear and specific goals in the areas of work/career, continuing education, independence and relationships.

This study provided positive preliminary results, indicating the promising effects of the *Epic Win* course on older teens and young adults with HFASD. Future research must include evaluating the *Epic Win* course with a larger sample sizes (i.e., 20-30 participants) to increase statistical power. Additionally, behavioural outcome measures must be designed in order to objectively measure changes in participants' ability to engage in self-determined behaviours. Lastly, follow-up measures with past participants who received the *Epic Win* course should be conducted in order to measure the generalization and maintenance of acquired self-determined behaviours and correlate this with acquisition of expected adult outcomes.

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Appendix A
Recruitment Poster

My Life as an Epic Win
Letter of Invitation to Participate in Research

My Life As An Epic Win!!
Transitioning Into Adulthood

Do you wonder what you'll do as an adult?
Do you dream of getting a job, starting a career,
going to college or university, having more friends,
having your own apartment, being more
independent?



**If you are a teen or young adult
(17 - 23) with Aspergers or ASD,
this 12-week course
may be for you!**

In this interactive, supportive and fun 12 week course:

- Get clear on what you really want in life
- Create a roadmap to help you reach your goals
- Learn how to stay in action despite barriers
- Build a support team to fulfill on your dreams

NEXT PROGRAM STARTING SEPTEMBER 2015

If you would like more information, please contact:
Dr. Rebecca Ward, Centre for Applied Disability Studies
Email: bward@brocku.ca Phone: 905-688-5550 x 5778

This research project has been reviewed, and has received clearance by the Brock University Research Ethics Board (File Number: 14-277). If you have any questions regarding this, please contact the research ethics office at: reb@brocku.ca, or 905-688-5550 x3035)

MY LIFE AS AN EPIC WIN: TRANSITIONING INTO ADULTHOOD

**Dr. Rebecca Ward, Centre for Applied Disability Studies, Brock University
Kimberly Saldanha and Jeffrey Esteves, M.A. students**

The *Epic Win* course is for older teens and young adults with high functioning ASD designed to support them in creating an “Epic Win” in life (borrowing from gaming terminology), developing an *Epic Win* attitude and powerful strategies and supports to win at the game of life. This transition to adulthood empowerment program is offered to 17 to 23 year olds with diagnoses of high functioning Autism Spectrum Disorder or Aspergers disorder.

The group will consist of 7-10 youth who are in high school or graduated and are looking for support in their transition to adulthood. In this 12-week course, we will use group discussion, modeling, role-play practice with peers, in-class exercises, and homework assignments to teach and support you in learning skills for successful transition to adulthood.

Over the course, you will learn to:

1. Create a vision for your future; with long and short-term goals in areas of life that matter to you (for example, career/work, education, independence, and social relationships)
2. Create actions plans and learn to keep in action on your plan
3. Identify ineffective thinking and action patterns that may be barriers to success
4. Develop problem solving strategies to overcome barriers and challenges
5. Build a support team through active listening and improved communication skills

Concurrently, parents/guardian/parent surrogate will be coached during their own weekly group on how to effectively support their youth’s transition. The parent group curriculum will mirror that of the youth, including several weeks of joint work between parents and youth.

The course culminates in creating an Epic Life video for each participant, in which you are interviewed individually about your interests, passions, strengths, accomplishments, and goals, and about the kind of supports you need for successful transition to adulthood.

This course will be evaluated as a research project through Brock University. Should you choose to participate, we will be collecting and analyzing data throughout the course to measure its effectiveness. The effectiveness of the research project will be evaluated through completion of pre-post course skill and satisfaction questionnaires. By the end of the course, it is expected that you will be more able to actively listen, work collaboratively, set goals, create action plans, problem solve, and stay in action on your goals.

Those who are interested in participating in this course as a research participant will have to complete a pre-screening assessment to determine eligibility. This pre-screening process will be explained to you in detail during an initial phone conversation.

For more information contact:

Dr. Rebecca Ward
Brock University, Centre for Applied Disability Studies
Phone: 905-688-5550 ext. 5778
Email: brward@brocku.ca

Appendix B

Phone Recruitment Script

Instructions: Introduce yourself, ask to speak to a parent, and paraphrase the following script:

Hello! My name is _____ and I am calling from Brock University working on the *My Life as an Epic Win* research project. I understand that you are interested in your son or daughter participating in the *Epic Win* research project. Are you free to talk for about 10-15 minutes or when would be a better time to talk to you? Do you have the letter of invitation explaining what the *Epic Win* course is about? I will reiterate the main points of the recruitment letter.

- The *Epic Win* course is for older teens and young adults with high functioning ASD designed to support them in creating an “Epic Win” in life, developing skills that will be needed to transition into adulthood. This transition to adulthood empowerment program is offered to 17 to 24 year olds with diagnoses of high functioning Autism Spectrum Disorder or Aspergers disorder.
- The group will consist of 8-10 youth who are in high school or graduated and are looking for support in their transition to adulthood. In this 12-week course, we will use group discussion, modeling, role-play practice with peers, in-class exercises, and homework assignments to teach and support you in learning skills for successful transition to adulthood.
- Over the course, your son/daughter will learn to:
 1. Create a vision for his/her future; with long and short-term goals in areas of life that matter to you (for example, career/work, education, independence, and social relationships)
 2. Create actions plans and learn to keep in action on his/her plan
 3. Identify ineffective thinking and action patterns that may be barriers to success
 4. Develop problem solving strategies to overcome barriers and challenges
 5. Build a support team through active listening and improved communication skills
- Concurrently, you and other parents will be coached during you own weekly group on how to effectively support your youth’s transition. The parent group curriculum will mirror that of the youth, including several weeks of joint work between parents and youth. If you or another parent/guardian is unable to attend the *Epic Win* sessions, we strongly encourage that a parent surrogate (i.e., older sibling, grandparent) be involved in the course sessions as we are assuming that the course’s effectiveness depends on improving communication and collaboration between youth and parents in the process of transitioning to adulthood.
- The course culminates in creating an Epic Life video for each participant, in which your son/daughter will be interviewed individually about his/her interests, passions, strengths, accomplishments, and goals, and about the kind of supports he/she need for successful transition to adulthood.
- The effectiveness of the course will be evaluated through completion of pre-post

measures, interviews, and satisfaction questionnaires. By the end of the course, it is expected that your son/daughter will be more able to actively listen, work collaboratively, set goals, create action plans, problem solve, and stay in action on his/her goals. We will also look at the impact of the course on our son/daughter's self-esteem and anxieties associated with transition to adulthood.

Can I ask you a few questions about your son/daughter to determine whether he/she will be a good fit for this research project? **[These questions are asked to get a sense of the potential participant's functioning level to determine if s/he is appropriate for this project]**

1. Firstly, does your son/daughter have an IEP and receive special education or extra supports in his/her high school?
2. Do you think that your son/daughter is able to achieve academically at the same level in some subjects as peers of his/her age?
3. What kind of things does your son/daughter struggle with academically?

Thank you for helping me to understand your son/daughter's ability level. Do you have any questions for me about the *Epic Win* course?

If you (interviewer) feel that this male/female would be a good fit for the *Epic Win* research project, ask to speak to the son/daughter to confirm his/her interest in the course.

Hi, this is _____. Your mom/dad said you might be interested in taking the *Epic Win* course. Can I tell you a bit about the course and then ask you a couple questions?

[Explain the purpose and methods of the course as describe above and answer any of their questions]

Now that I've explained what the course is and how it works, can you tell me if you are interested in taking the *Epic Win* course?

If the young person is clearly interested in taking the *Epic Win* course, have a conversation with their parents to set up a time for the parent and youth to come to Brock to complete pre-screening measures.

If you are interested in your son/daughter participating in this study, we will ask you to come to Brock University for a face-to-face meeting to complete two pre-screening assessments to determine inclusion in the study. The Wechsler Abbreviated Scale of Intelligence -Second Edition is an intelligence measure and the Autism Spectrum Screening Questionnaire is a tool to confirm your son/daughter's ASD diagnosis. Once these measures are completed, we will review the measures and determine if your son/daughter will be a good fit for this study and eligible to participate. If your son/daughter is not eligible to participate in this research study, Dr. Ward will give you information about other local support services that may provide similar supports. You may be eligible to participate in a later *Epic Win* group that will run after this research study is complete (potentially, in a year from now).

Appendix C

My Life as an Epic Win
Informed Consent Form to Participate in *Epic Win* Course Research

Date: May 8, 2015

Project Title: *My Life as an Epic Win* Research Project

Principal Investigator (PI):

Dr. Rebecca Ward

Assistant Professor

Centre for Applied Disability Studies

Brock University

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Principal Student Investigators:

Jeffrey Esteves and Kimberly Saldanha

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INVITATION

You are invited to participate in a research study involving a transition to adulthood course called the *My Life as an Epic Win* (hereafter called, *Epic Win*). In this course, you will learn to create a vision for your future (long-term goals) and short-term goals in the areas of life that are most important to you (for example, career/work, education, independence, and social relationships). Over the 12 weeks, you will learn to set goals, create action plans, make decisions, problem solve, take actions, and build a support system to help your transition into adulthood be successful. As well, you will work on communication skills, like listening to others and expressing yourself, critical skills for your success as an adult.

WHAT'S INVOLVED IN TAKING THE COURSE:

The *Epic Win* course is for older teens and young adults (ages 17 to 23) with high functioning ASD to support them in creating an “Epic Win” in life (borrowing from gaming terminology), developing an *Epic Win* attitude and powerful strategies and supports to win at the game of life.

The group will consist of 8 -10 youth who are in high school or graduated and are looking for support in their transition to adulthood. In this 12-week course, we will use group discussion, modeling, practice with peers and parents, in-class exercises, and homework assignments to teach and support you in learning critical skills for successful transition to adulthood.

It is our intention that, over the duration of the course, you will learn and master new skills and, by the end of the course, you will be able to achieve goals you set related to career/job, education, independence and social relationships.

CONCURRENT PARENT COURSE:

While you are in your own course, one or both of your parents will be coached in their own weekly group on how to support your transition to adulthood. The parents will learn the same concepts and strategies as you. In some weeks you will practice skills together with your parents or with someone else's parents.

EPIC LIFE VIDEO:

At the end of the course, you will create an Epic Life video (optional), in which you are interviewed about your interests, passions, strengths, accomplishments, and goals, and about the kind of supports you need for successful transition to adulthood. At the end of the course, you will be given a copy of your Epic Life video as a reminder of your life vision and as a tool to share with family members, educators and community workers who support your transition to adulthood.

WHAT'S INVOLVED IN THE RESEARCH PARTICIPATION:

Prior to starting the course, you will be asked to come to Brock University to complete four questionnaires and participate in a brief interview. Completion of these questionnaires and the interview will take about two hours, which you can do in one or two visits. The questionnaires and interview are assessing several common aspects of transition to adulthood: self-determination, goal setting, goal attainment, problem solving, self-esteem, and anxiety. The interview that you complete at this time will be audio and video taped so that we can review it at a later date. When the *Epic Win* course is finished, we will ask you to come back to Brock to complete the same set of assessments and a follow-up interview (which will again be video and audio recorded.) We do this so that we can determine how useful or effective the course has been for you and the other youth in learning skills needed for transition to adulthood. By the end of the course, we hope that you will be more able to set goals, create action plans, problem solve, and achieve your goals. We also hope that in learning these skills you will have less anxiety about the transition to adulthood and increased self-esteem.

POTENTIAL BENEFITS

Possible benefits for your participation in this study include teaching, coaching, and practice in important skills needed for you to transition into adulthood. Successful participation could result in increases in skills such as goal setting, active listening, problem solving, and action planning. We hope that by the end of the course you will experience increased self-esteem, and decreased anxiety surrounding the transition to adulthood, which is a difficult time for many people.

POTENTIAL RISKS

Throughout the *Epic Win* course, you will be asked to share information about yourself, your ASD diagnosis, your strengths and challenges, your goals in life, and challenges or problems you deal with in trying to achieve your goals. Throughout the course, we strive

to create a safe space for sharing; however, you will never be forced to share anything you don't want to share. Due to the nature of this discussion-based course, you may at times experience discomfort, such as feelings of embarrassment or worry. For some participants, there may be some general stress associated with participating in group discussions. We will encourage everyone to participate in discussions and activities in order to experience the full effect of the *Epic Win* course; however, participation in group discussion will always be optional. In consideration of any emotional risks, you will be reminded at the beginning of each session that you are *not* required to participate during group discussion if you choose not to. If at any time during the course or in between sessions you wish to speak to the Dr. Ward about challenges you are having in the course or because of the course, you will be given contact information and can set up a time to speak outside of the sessions.

CONFIDENTIALITY

During the *Epic Win* the initial face-to-face meeting where you will be asked to complete two pre-screening assessments (see the next sections, Eligibility For The Study, for more information), we will ask you to complete an intake form where you will provide your name, age, date of birth, and address was collected. Collecting this information is necessary so as to complete the IQ and ASD screening assessments. Any paper data forms that have participant's identifying information on it will be kept in a locked cabinet in Dr. Rebecca Ward's office, which is also secured. Audio and video recordings will also be kept under lock and key in her office. Electronic files with identifying information will be kept on password protected computers and no personal information about you will ever be emailed between the researchers. Paper data will be transferred in face-to-face meetings in Dr. Ward's office, and electronic files will be transferred using a USB drive to ensure participant confidentiality. The only people that will have access to your personal information will be the primary investigators, Dr. Rebecca Ward, Jeffrey Esteves, and Kimberly Saldanha. Should other graduate students at Brock join the research project as an assistant, they will have to sign an oath of confidentiality. Once the course has finished, all of your personal information will be removed from your data. Names will be replaced with an identification number. To ensure the confidentiality of data during the project, names of participants will not be used in any emails, and will not be used when discussing the study in areas outside of the research space.

ELIGIBILITY FOR THE STUDY

If you are interested in participating in this study, your parent will have a phone conversation with Dr. Rebecca Ward to get more information about the study. After the phone conversation, if it seems that young participation in the study will benefit you and you are interested in participating, you and one parent will be asked to come to Brock University for a face-to-face meeting to complete two pre-screening assessments to determine inclusion in the study. The Wechsler Abbreviated Scale of Intelligence -Second Edition is an intelligence measure and the High-Functioning Autism Spectrum Screening Questionnaire is a tool to confirm your ASD diagnosis. Once these measures are completed, Dr. Rebecca Ward, Jeffrey Esteves and Kimberly Saldanha will review the measures and determine if you will benefit from participation in this study and are eligible to participate. If you are not eligible to participate in this research study, Dr. Rebecca Ward will give your parents information about

other local support services that may provide similar supports. You may be eligible to participate in a later *Epic Win* group that will run after this research study is complete (potentially, in a year from now).

VOLUNTARY PARTICIPATION

Participation in this study is voluntary. If you wish, you may decline to give consent to participate in this study. If you decide to participant, it is important that you are aware that you can withdraw your consent from participating if at any point you do not feel comfortable. If you decide to participant for this research project, it is important that you are aware that you can withdraw your consent from participating if at any point for any reason. You may decline to answer any question or withdraw from the study at any time (regardless of whether or not you feel comfortable). Refusing to give consent or withdrawing from this study can be done so without any concern for loss of services or loss of opportunities to participate in future research through Brock University. Should you choose to withdraw from the participation of this research project, your data will be destroyed immediately. If you choose to withdraw from the research project, you can still stay in the *Epic Win* group. After withdrawing, you will not have to complete any research measures. You can also withdraw from both the course and the research project, however you will not be able to re-join the current group. You can, however, sign up for a new group in 2016.

PUBLICATION OF RESULTS

If you would like to learn the results of research study, following its completion, you will be provided with a one-page summary of the results. This one page summary will not include any identifying information, and will discuss the results of the study more generally, using group performance, rather than indicating any individual participant's results. You and your family will also be invited to attend a research night one month after the study concludes, where the research team will present the results of the study in PowerPoint format. This research presentation will discuss the effectiveness of the course more generally. This night will take place after the entire project ends, which will be in April 2016. The reason for this, is that a second group of participants will be enrolled in the *Epic Win* course from January to April.

As for publication of the results, the results will highlight the effectiveness the *Epic Win* course in increasing self-determined behaviours and increasing self-esteem among all the participants. A manuscript will be written, and will be submitted for peer- review to academic journals (e.g., *Journal of Applied Behavior Analysis*) for publication. Research abstracts will be submitted to various conferences in order to present a presentation or poster. Presenting the results of this study at conferences hosted by The Ontario Association for Behaviour Analysis will benefit other practitioners who work with young adults with Asperger's Syndrome and high functioning ASD, in order to assist them in their transition to adulthood. The long-term goal of this project is to manualize the *Epic Win* curriculum so that it can be used within the school board and other agencies that work with transition-aged youth.

Would you be interested in receiving a brief report of the results of this research study?

YES ☐ NO ☐

CONTACT INFORMATION AND ETHICS CLEARANCE

If you have any questions about this study or require further information, please contact Dr. Rebecca Ward using the contact information provided above. This research project has been reviewed, and has received clearance by the Brock University Research Ethics Board (File Number: 14-277). If you have any comments or concerns about your rights as a research participant, please contact the Research Ethics Office at (905) 688-5550 Ext. 3035, reb@brocku.ca.

Thank you for your assistance in this project.

Once signed, we will give you a copy of this consent form for your records, along with our contact emails and phone numbers.

CONSENT FORM SIGNATURES

I understand that by agreeing to participate in this study, I am committing to participate in the following three parts to the study (please initial on each of the lines provided):

1. I agree to complete the pre-screening questionnaires and I understand that if I do not meet the criteria for the study, I will not be asked to participate in the *Epic Win* course at this time _____
2. I agree to complete the pre- and post-course interviews and all of the questionnaires that will be completed before and after the *Epic Win* course _____
3. I agree to attend all of the *Epic Win* sessions and do the homework assignments, to the best of my ability _____

I agree to participate in this study described above. I have made this decision based on the information I have read in the Information-Consent Letter. I have had the opportunity to ask questions and to receive any additional details I wanted about the study and I understand that I may ask further questions about the course, as my questions arise. I understand that I may withdraw this consent at any time.

Participant Name: _____

Signature: _____

Date: _____

For participants under the age of 18, please have a parent or guardian sign below.

I agree for my adolescent (under the age of 18) to participate in this study described above. I have made this decision based on the information I have read in the Information-Consent Letter. I have had the opportunity to receive any additional details I wanted about the study and understand that I may ask questions in the future. I understand that I may withdraw this consent at any time.

Parent/ Guardian's Name: _____

Signature: _____

Date: _____

Participant Name: _____

Signature: _____

Date: _____

If you are not eligible to participate in this research project, would you be interested in participating in an *Epic Win* group? This group would run in 2016, and you would not include any of the research measures discussed in this consent form.

☐ Yes, I would be interested in participating in a future *Epic Win* group

☐ No, I would not like to participate in a future *Epic Win* group

If you would like to participate in a future group, please provide us with your contact information so that we can invite you to a group.

Name: _____

Phone Number: _____

Email: _____

In the future, we may run a new research project based on the *Epic Win* course. Would it be okay for us to contact you to ask if you'd be interested in participating?

☐ Yes, it would be okay for you to contact me about future research

☐ No, it would not be okay for you to contact me about future research

Appendix D

MY LIFE AS AN EPIC WIN

INTAKE FORM

PARTICIPANTS NAME: _____**PHONE NUMBER:** _____**EMAIL:** _____**DATE OF BIRTH:** _____**ADDRESS:** _____**PARENT(S) NAME(S):** _____**PHONE NUMBER:** _____**EMAIL:** _____**DIAGNOSIS:**
_____**DATE OR AGE OF DIAGNOSIS:** _____**WHO MADE DIAGNOSIS:** _____

Appendix E

The Autism Spectrum Screening Questionnaire

The High-Functioning Autism Spectrum Screening Questionnaire (ASSQ)

Name of child Date of birth

Name of rater Date of rating

This child stands out as different from other children of his/her age in the following way:

	No	Somewhat	Yes
1. is old-fashioned or precocious	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. is regarded as an "eccentric professor" by the other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. lives somewhat in a world of his/her own with restricted idiosyncratic intellectual interests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. accumulates facts on certain subjects (good rote memory) but does not really understand the meaning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. has a literal understanding of ambiguous and metaphorical language	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. has a deviant style of communication with a formal, fussy, old-fashioned or "robotlike" language	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. invents idiosyncratic words and expressions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. has a different voice or speech	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. expresses sounds involuntarily; clears throat, grunts, smacks, cries or screams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. is surprisingly good at some things and surprisingly poor at others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. uses language freely but fails to make adjustment to fit social contexts or the needs of different listeners	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. lacks empathy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. makes naive and embarrassing remarks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. has a deviant style of gaze	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. wishes to be sociable but fails to make relationships with peers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. can be with other children but only on his/her terms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. lacks best friend	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. lacks common sense	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. is poor at games: no idea of cooperating in a team, scores "own goals"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. has clumsy, ill coordinated, ungainly, awkward movements or gestures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. has involuntary face or body movements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. has difficulties in completing simple daily activities because of compulsory repetition of certain actions or thoughts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. has special routines: insists on no change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. shows idiosyncratic attachment to objects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. is bullied by other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. has markedly unusual facial expression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. has markedly unusual posture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix F

AIR Self-Determination Scale®**STUDENT FORM**

Student's Name _____ Date _____

School Name _____ Your Grade _____

Your Date of Birth _____
Month Day Year**HOW TO FILL OUT THIS FORM**

Please answer these questions about how you go about getting what you want or need. This may occur at school, or after school, or it could be related to your friends, your family, or a job or hobby you have.

This is not a Test. There are no right or wrong answers. The questions will help you learn about what you do well and where you may need help.

Goal You may not be sure what some of the words in the questions mean. For example, the word **goal** is used a lot. A **goal is something you want to get or achieve**, either now or next week or in the distant future, like when you are an adult. You can have many different kinds of goals. You could have a goal that has to do with school (like getting a good grade on a test or graduating from high school). You could have a goal of saving money to buy something (a new iPod® or new sneakers), or doing better in sports (getting on the basketball team). Each person's goals are different because each person has different things that they want or need or that they are good at.

Plan Another word that is used in some of the questions is **plan**. A **plan is the way you decide to meet your goal, or the steps you need to take in order to get what you want or need**. Like goals, you can have many different kinds of plans. An example of a plan to meet the goal of getting on the basketball team would be: to get better by shooting more baskets at home after school, to play basketball with friends on the weekend, to listen to the coach when the team practices, and to watch the pros play basketball on TV.

The AIR Self-Determination Scale was developed by the American Institutes for Research (AIR), in collaboration with Teachers College, Columbia University, with funding from the U.S. Department of Education, Office of Special Education Programs (OSEP), under Cooperative Agreement HO23J200005

HOW TO MARK YOUR ANSWERS**EXAMPLE QUESTION:**

I check for errors after completing a project.

EXAMPLE ANSWER:

Circle the number of the answer which tells what you are most like:
(Circle **ONLY ONE** number).

- 1 **Never**.....student **never** checks for errors.
- 2 **Almost Never**.....student **almost never** checks for errors.
- 3 **Sometimes**.....student **sometimes** checks for errors.
- 4 **Almost Always**.....student **almost always** checks for errors.
- 5 **Always**.....student **always** checks for errors.

REMEMBER

There are NO right or wrong answers.

This will not affect your grade. So please think about each question carefully before you circle your answer.

THINGS I DO

1. I know what I need, what I like, and what I'm good at.	Never <input type="checkbox"/> 1	Almost Never <input type="checkbox"/> 2	Sometimes <input type="checkbox"/> 3	Almost Always <input type="checkbox"/> 4	Always <input type="checkbox"/> 5
2. I set goals to get what I want or need. I think about what I am good at when I do this.	Never <input type="checkbox"/> 1	Almost Never <input type="checkbox"/> 2	Sometimes <input type="checkbox"/> 3	Almost Always <input type="checkbox"/> 4	Always <input type="checkbox"/> 5
Things I Do – Total Items 1 + 2					
3. I figure out how to meet my goals. I make plans and decide what I should do.	Never <input type="checkbox"/> 1	Almost Never <input type="checkbox"/> 2	Sometimes <input type="checkbox"/> 3	Almost Always <input type="checkbox"/> 4	Always <input type="checkbox"/> 5
4. I begin working on my plans to meet my goals as soon as possible.	Never <input type="checkbox"/> 1	Almost Never <input type="checkbox"/> 2	Sometimes <input type="checkbox"/> 3	Almost Always <input type="checkbox"/> 4	Always <input type="checkbox"/> 5
Things I Do – Total Items 3 + 4					
5. I check how I'm doing when I'm working on my plan. If I need to, I ask others what they think of how I'm doing.	Never <input type="checkbox"/> 1	Almost Never <input type="checkbox"/> 2	Sometimes <input type="checkbox"/> 3	Almost Always <input type="checkbox"/> 4	Always <input type="checkbox"/> 5
6. If my plan doesn't work, I try another one to meet my goals.	Never <input type="checkbox"/> 1	Almost Never <input type="checkbox"/> 2	Sometimes <input type="checkbox"/> 3	Almost Always <input type="checkbox"/> 4	Always <input type="checkbox"/> 5
Things I Do – Total Items 5 + 6					

Please go on to the next page ⇒

HOW I FEEL

1. I feel good about what I like, what I want, and what I need to do.	Never □ 1	Almost Never □ 2	Sometimes □ 3	Almost Always □ 4	Always □ 5
2. I believe that I can set goals to get what I want.	Never □ 1	Almost Never □ 2	Sometimes □ 3	Almost Always □ 4	Always □ 5
How I Feel – Total Items 1 + 2					
3. I like to make plans to meet my goals.	Never □ 1	Almost Never □ 2	Sometimes □ 3	Almost Always □ 4	Always □ 5
4. I like to begin working on my plans right away.	Never □ 1	Almost Never □ 2	Sometimes □ 3	Almost Always □ 4	Always □ 5
How I Feel – Total Items 3 + 4					
5. I like to check on how well I'm doing in meeting my goals.	Never □ 1	Almost Never □ 2	Sometimes □ 3	Almost Always □ 4	Always □ 5
6. I am willing to try another way if it helps me to meet my goals.	Never □ 1	Almost Never □ 2	Sometimes □ 3	Almost Always □ 4	Always □ 5
How I Feel – Total Items 5 + 6					

Please go on to the next page ⇒

WHAT HAPPENS AT SCHOOL

1. People at school listen to me when I talk about what I want, what I need, or what I'm good at.	Never <input type="checkbox"/> 1	Almost Never <input type="checkbox"/> 2	Sometimes <input type="checkbox"/> 3	Almost Always <input type="checkbox"/> 4	Always <input type="checkbox"/> 5
2. People at school let me know that I can set my own goals to get what I want or need.	Never <input type="checkbox"/> 1	Almost Never <input type="checkbox"/> 2	Sometimes <input type="checkbox"/> 3	Almost Always <input type="checkbox"/> 4	Always <input type="checkbox"/> 5
What Happens at School – Total Items 1 + 2					
3. At school, I have learned how to make plans to meet my goals and to feel good about them.	Never <input type="checkbox"/> 1	Almost Never <input type="checkbox"/> 2	Sometimes <input type="checkbox"/> 3	Almost Always <input type="checkbox"/> 4	Always <input type="checkbox"/> 5
4. People at school encourage me to start working on my plans right away.	Never <input type="checkbox"/> 1	Almost Never <input type="checkbox"/> 2	Sometimes <input type="checkbox"/> 3	Almost Always <input type="checkbox"/> 4	Always <input type="checkbox"/> 5
What Happens at School – Total Items 3 + 4					
5. I have someone at school who can tell me if I am meeting my goals.	Never <input type="checkbox"/> 1	Almost Never <input type="checkbox"/> 2	Sometimes <input type="checkbox"/> 3	Almost Always <input type="checkbox"/> 4	Always <input type="checkbox"/> 5
6. People at school understand when I have to change my plan to meet my goals. They offer advice and encourage me when I'm doing this.	Never <input type="checkbox"/> 1	Almost Never <input type="checkbox"/> 2	Sometimes <input type="checkbox"/> 3	Almost Always <input type="checkbox"/> 4	Always <input type="checkbox"/> 5
What Happens at School – Total Items 5 + 6					

Please go on to the next page ⇒

WHAT HAPPENS AT HOME

1. People at home listen to me when I talk about what I want, what I need, or what I'm good at.	Never <input type="checkbox"/> 1	Almost Never <input type="checkbox"/> 2	Sometimes <input type="checkbox"/> 3	Almost Always <input type="checkbox"/> 4	Always <input type="checkbox"/> 5
2. People at home let me know that I can set my own goals to get what I want or need.	Never <input type="checkbox"/> 1	Almost Never <input type="checkbox"/> 2	Sometimes <input type="checkbox"/> 3	Almost Always <input type="checkbox"/> 4	Always <input type="checkbox"/> 5
What Happens at Home – Total Items 1 + 2					
3. At home, I have learned how to make plans to meet my goals and to feel good about them.	Never <input type="checkbox"/> 1	Almost Never <input type="checkbox"/> 2	Sometimes <input type="checkbox"/> 3	Almost Always <input type="checkbox"/> 4	Always <input type="checkbox"/> 5
4. People at home encourage me to start working on my plans right away.	Never <input type="checkbox"/> 1	Almost Never <input type="checkbox"/> 2	Sometimes <input type="checkbox"/> 3	Almost Always <input type="checkbox"/> 4	Always <input type="checkbox"/> 5
What Happens at Home – Total Items 3 + 4					
5. I have someone at home who can tell me if I am meeting my goals.	Never <input type="checkbox"/> 1	Almost Never <input type="checkbox"/> 2	Sometimes <input type="checkbox"/> 3	Almost Always <input type="checkbox"/> 4	Always <input type="checkbox"/> 5
6. People at home understand when I have to change my plan to meet my goals. They offer advice and encourage me when I'm doing this.	Never <input type="checkbox"/> 1	Almost Never <input type="checkbox"/> 2	Sometimes <input type="checkbox"/> 3	Almost Always <input type="checkbox"/> 4	Always <input type="checkbox"/> 5
What Happens at Home – Total Items 5 + 6					

Please go on to the next page ⇒

PLEASE WRITE YOUR ANSWERS TO THE FOLLOWING QUESTIONS...

Give an example of a goal you are working on.

What are you doing to reach this goal?

How well are you doing in reaching this goal?

THANK YOU!

The AIR Self-Determination Profile
Student Form

Items	Think			Do			Adjust		
	1-2	3-4	5-6	1-2	3-4	5-6	1-2	3-4	5-6
10									
9									
8									
7									
6									
5									
4									
3									
2									
1									
0									

Things I Do

Total

How I Feel

Total

Items	Think			Do			Adjust		
	1-2	3-4	5-6	1-2	3-4	5-6	1-2	3-4	5-6
10									
9									
8									
7									
6									
5									
4									
3									
2									
1									
0									

What Happens at School

Total

What Happens at Home

Total

Capacity

Opportunity

Level of Self-Determination

120

110

100

90

80

70

60

50

40

30

20

10

0

100%

90%

80%

70%

60%

50%

40%

30%

20%

10%

0

Level of Self-Determination

(Write sum in box and mark in column)

Name

Date

Appendix G

My Life as an Epic Win
Goal-Action Questionnaire (GAQ)

NAME:

DATE:

Purpose Of This Questionnaire: In this questionnaire, you are going to answer some questions about your goals for the future, and how you can take action on those goals. Completion of this questionnaire will help us to understand you and your current thinking about goal setting and problem solving. Please read each section carefully and try to answer the questions as best as you can.

1. Goals in Each Area of Life

a) What are some of your long-term goals in the each of the four areas below?

Career/ Work

Continuing Education

Independent Living

Relationships

b) In the chart on this next page, pick one goal in each of the four areas of life and write what actions that you have taken in the last month to achieve that goal.

Area of Life	Goals (for next few years)	Actions Taken (in last month)
Career/ Work		
Continuing Education		
Independent Living		
Relationships		

2. Supports

- a. Who are the people who will support you in achieving your goals?

- b. How do these people support you?

- c. What supports do you need, but do **not** already have?

3. Understanding Yourself

- a. Do you have a **diagnosis** of Aspergers or Autism? Or another diagnosis?
Please specify.

- b. If someone asked you, how would you explain what your diagnosis means?

- c. How does having this diagnosis cause you **challenges** in your transition to adulthood?

- d. How does having this diagnosis give you **strengths** that will help you in your transition to adulthood?

4. Solving Problems

Please fill in the following chart to tell us about a problem that you have faced in the past month, related to one of your goals.

1. Tell us one goal that has been problematic		
2. Describe the problem you had related to that goal.		
3. What were some possible solutions to that problem? 4. What were the pros and cons to each solution?	Solution 1	Pros/cons
	Solution 2	Pros/cons
	Solution 3	Pros/cons
5. What solution did you choose? Did that solution help to solve your problem?		
6. If you had a similar problem again, what solution would you choose?		

5. Self-management

The following are some strategies people use to help themselves get things done.

Circle the number that best fits how often you use each strategy.

- a. When given an instruction or task to do, I write it down so I can remember.

1=never 2=rarely 3=sometimes 4=often 5=always

- b. I make a list of things TO DO so I can remember everything and I check things off my list as I complete the task.

1=never 2=rarely 3=sometimes 4=often 5=always

- c. When I complete a task, I praise or reward myself for a job well done.

1=never 2=rarely 3=sometimes 4=often 5=always

- d. When I complete a task, I let others know the task is done.

1=never 2=rarely 3=sometimes 4=often 5=always

- e. When I am struggling with a task or unclear about what to do, I ask for help.

1=never 2=rarely 3=sometimes 4=often 5=always

What are some other strategies that you use to help yourself get things done?

Thank you for taking the time to complete this questionnaire!

Appendix H

My Life as an Epic Win
Goal-Action Questionnaire (GAQ)

Scoring Sheet

1. Goals in Each Area of Life

Rate each Goal: How observable and measureable is each goal?

0= no goal written down

1= goal is not observable or measurable (e.g., I want to be independent)

2= goal is observable and measureable (e.g., I want to be able to live on my own in my own apartment).

3= goal is written as a SMART goal (i.e., simple, measureable, achievable, relevant and time bound – e.g., in three years, I will be living in an apartment in St. Catharines, near my parents)

Career/Work

Goal 1: 0 1 2 3

Goal 2: 0 1 2 3

Goal 3: 0 1 2 3

Continuing Education

Goal 1: 0 1 2 3

Goal 2: 0 1 2 3

Goal 3: 0 1 2 3

Independent Living

Goal 1: 0 1 2 3

Goal 2: 0 1 2 3

Goal 3: 0 1 2 3

Relationships

Goal 1:	0	1	2	3
Goal 2:	0	1	2	3
Goal 3:	0	1	2	3

Number of actions taken in the last month:

0 = no actions provided for that goal

1 = 1 action and it not obviously related to the goal specified – e.g., for goal of living in own apartment, writes “I am taking driving lessons”.

2 = 1 clearly related action (e.g., I am taking cooking classes; I’m learning to budget; I searched the price of apartments in my parent’s neighborhood)

3 = 2 or more related actions (as above)

Career/Work

Goal 1:	0	1	2	3
Goal 2:	0	1	2	3
Goal 3:	0	1	2	3

Continuing Education

Goal 1:	0	1	2	3
Goal 2:	0	1	2	3
Goal 3:	0	1	2	3

Independent Living

Goal 1:	0	1	2	3
Goal 2:	0	1	2	3

Relationships

Goal 1:	0	1	2	3
Goal 2:	0	1	2	3
Goal 3:	0	1	2	3

Goal Subtotal Score: _____ (max. 72)

2. Supports

Who are the people who will support you in achieving your goals?

Number of people:

- 0= 0 people
- 1= 1-2 people
- 2= 3-4 people
- 3= 5 or more people

How do these people support you?

Clarity on how the person is supported:

- 1= unclear response (e.g., my parents are always there for me)
- 2= somewhat clear response (e.g., my parents help me to see what I need to do; my sister encourages me to try new things; my teacher gets me the information I need)
- 3= clear response (e.g., my parents paid for my cooking class and drive me to classes; my sister helped me learn to ride the bus downtown; my teacher emailed me the name and phone number of people who can help me find a job.)

What supports are you looking for, but do not already have?

Clarity on the kinds of supports needed:

- 1= unclear response (e.g., I need help with everything; No one will help; I'll take all the help I can get)
- 2= somewhat clear response (e.g., I don't have anyone to help me with jobs; I need support to learn how to keep my apartment clean)
- 3= clear response (e.g., I need someone who can help me apply for jobs and do interviews; I need help going to see apartments, but my parents don't have a car)

Supports Subtotal Score: _____ (max. 10)

3. Understanding Yourself

Do you have a diagnosis of Aspergers or Autism? Or another diagnosis?

Awareness of his/her diagnosis:

0= unaware of his/her diagnosis of Aspergers or Autism (e.g., answering no or leaving the question blank).

1= aware that he/she has a diagnosis, consistent with his/her intake form (e.g., answering yes)

2=aware of what his/her diagnosis is (e.g., identifying Aspergers/ASD or other diagnosis)

If someone asked you, how would you explain what your diagnosis means?

Clarity on how the individual understands his/her diagnosis:

1= unclear response (e.g., I have challenges; I am different from others)

2= somewhat clear response (e.g., Because of my Aspergers/ASD, I have challenges; I have a hard time making friends; I have a good memory)

3= clear response (e.g., Having Aspergers/ASD, I have more challenges with communicating with others; My diagnosis means that I may require more support to be independent; Having Aspergers/ASD means that I am smart in different ways, such as having a great memory)

How does having Autism/Asperger's cause you challenges in your transition to adulthood?

Clarity on his/her challenges:

1= unclear response (e.g., I have challenges; I am different from others; I am not independent)

2= somewhat clear response (e.g., Because of my Aspergers/ASD, I have challenges being independent; I may have a harder time getting a job)

3= clear response (e.g., Having Aspergers/ASD, I find it hard to communicate with others, which will make applying for jobs challenging; I have challenges being able to cook and clean for myself; I find it difficult trying adapt to change)

How does having Autism/Aspergers give you strengths that will help you in your transition to adulthood?

Clarity on his/her strengths:

1= unclear response (e.g., I have strengths; I am smart)

2= somewhat clear response (e.g., I have a good memory; I am good at math; I am honest)

3= clear response (e.g., I am good at following routines, which will help me live independently one day; I have a good memory, which will help me to learn quickly in the work environment)

Understanding Yourself Subtotal Score: _____(max.11)

4. Solving Problems

Related to one of your goals in any area of life, tell us about a problem that you've had in the past month.

How specific is the problem?

0= did not identify a problem

1= unclear problem (e.g. I have difficulty getting things done; I have social issues)

2= somewhat specific problem (e.g. I have difficulty getting my school work complete; I have difficulty talking to people)

3= specific problem (e.g. I have difficult getting my homework complete at get home because I get distracted; I have difficulty approaching new people and starting a conversation).

What were some solutions that you thought of?

Number of solutions thought of:

0= no solutions reported for the problem

1= 1 solution identified

2= 2 solutions identified

3=3 or more solutions identifies

What were some solutions that you thought of?

Clarity and relatedness of the solutions to the problem:

0= No solutions identified

- 1= Solution identified and it appears unclear or unrelated to the specific problem – e.g., for problem relating to not being allowed to live independently in own apartment, writes “I am taking driving lessons”.
- 2 = Somewhat clear and related solution to the problem (e.g., I can practice life skills; I can be more independent)
- 3= Clear solution that is related to the problem (e.g., I am taking cooking classes; I’m learning to budget; I searched the price of apartments in my parent’s neighborhood)

Solution 1:	0	1	2	3
Solution 2:	0	1	2	3
Solution 3:	0	1	2	3

Did you think of pros and cons for each possible solution?

0=No
1=Yes

Solution 1:	0	1
Solution 2:	0	1
Solution 3:	0	1

What were the pros and cons for each possible solution?

Clarity of the pros/cons for each solution:

0= did not list any pros/cons

1= unclear response (e.g., pros: I would be happy; cons: parents would be mad)

2= somewhat clear response (e.g., pros: I would learn to be more independent, my parents would be happy I am taking initiative; cons: It would take too much time)

3= clear response (e.g., pros: by taking cooking classes, I am learning a life skill that will be useful for when I live independently; cons: learning to cook takes quite a bit of time and I would not have as much time to play video games)

Solution 1:	0	1	2	3
-------------	---	---	---	---

Solution 2: 0 1 2 3

Solution 3: 0 1 2 3

What solution did you choose? Did that solution help to solve your problem?

Clarity of response and relatedness of the solution to the problem:

0= no solution identified

1= Solution was chosen, however the response was unclear and the solution did not solve the problem (e.g., for problem relating to not being allowed to live independently in own apartment, writes “I am taking driving lessons”)

2= Somewhat clear response and solution chosen can somewhat solve the problem (e.g., I did chores around the house)

3= Clear response and solution would solve the problem (e.g., I am taking cooking classes; I’m learning to budget; I searched the price of apartments in my parent’s neighborhood)

If you had a similar problem again, what solution would you choose? Why did you choose this solution?

Clarity of response:

1= unclear response (e.g., I would do the same thing)

2= somewhat clear response (e.g., I would try solution number 2; I would try something new)

3= clear response (e.g., Instead of taking cooking classes, I would try to look for affordable apartments near my parent’s house; I would try to have a conversation with my parents about moving out first and what skills I may need to learn in order to move out).

Solving Problems Subtotal Score: _____(max. 36)

5. Self-management

When given an instruction or task to do, I write it down so I can remember

1=never 2=rarely 3=sometimes 4=often 5=always

I make a list of things TO DO so I can remember everything and I check things off my list as I complete the task

1=never 2=rarely 3=sometimes 4=often 5=always

When I complete a task, I praise or reward myself for a job well done

1=never 2=rarely 3=sometimes 4=often 5=always

When I complete a task, I let others know the task is done

1=never 2=rarely 3=sometimes 4=often 5=always

When I am struggling with a task or unclear about what to do, I ask for help

1=never 2=rarely 3=sometimes 4=often 5=always

What are some other strategies that you use to manage your behaviour?

Number of strategies thought of:

- 0= 0 strategies reported
- 1= 1 strategy reported
- 2=2 strategies reported
- 3= 3 or more strategies reported

Clarity of the strategies reported:

- 0= 0 strategies reported
- 1= Unclear strategy(ies) – e.g., I use a calendar; I a white board; I use my cell-phone
- 2= Somewhat clear strategy(ies) – e.g., I use a calendar to mark events; I write lists on a white board; I set alarms on my cellphone
- 3= Clear strategy(ies) –e.g., I use a calendar to keep track of my meetings and appointments; I write lists of things I need to do on a dry-erase whiteboard that is in my room and I erase a task once it is complete; I use my cell-phone to set reminders and alarms for tasks that I need to do at a particular time

Self-Management Subtotal Score: ____ (max. 31)

Appendix I

*My Life as an Epic Win: Curriculum Outline***SESSION 1: MY LIFE AS AN EPIC WIN**

Epic Win attitude; BEST self; Visioning your future; Vision Board; Setting goals in four areas of life: Career/Work, Further Education, Relationships, Independence

SESSION 2: LIFE CHALLENGES

Active Listening so others know you hear and understand them; Practice Concerns for the future; Negative and limiting beliefs; Positive Re-framing Self-management and Buddy system

SESSION 3: BUILDING A TEAM

Understanding the challenges and strengths associated with ASD
Importance of failure in building resiliency; how you are already resilient
Learning to seek support; Social skills needed to build your team
Introduction to turning Long-Term goals into SMART Goals

SESSION 4 AND 5: CAREER/WORK

GOAL SETTING around **Career/Work**: what are your strengths and possible challenges in the area of getting a job, work skills, keeping employment?
SMARTER goals and writing ACTION PLANS
PROBLEM SOLVING - role-playing solutions and discussing best solution

SESSION 6 AND 7: FURTHER EDUCATION

Goals setting around **Further Education**: what are your strengths and possible challenges in the area of going to college, university or taking development courses?
SMARTER goals and action plans
Problem Solving - role-playing solutions and discussing best solution

SESSION 8 AND 9: INDEPENDENCE

Goals setting around **Independence** what are your strengths and possible challenges in achieving the level of independence you would like?
SMARTER goals and action plans
Problem Solving - role-playing solutions and discussing best solution

SESSION 10: RELATIONSHIPS

Goals setting around **Relationships** what are your strengths and challenges in improving existing relationships, making new friends, keeping friends, romance?
SMARTER goals and action plans
Problem Solving - role-playing solutions and discussing best solution

SESSION 11: CREATING THE EPIC LIFE PLAN VIDEO

Creating Videos to represent your Epic Life Plan.
Review: Where to go next? Applying what you learned to new situations

SESSION 12: WRAP UP AND CELEBRATION

Completion of post-course questionnaires

What next?

Party to celebrate completion of Epic Life Plan and to watch Epic Life Plan videos.

Appendix J

Examples of two *Epic Win* sessions (1 and 4)**SESSION 1: MY LIFE AS AN EPIC WIN****YOUNG ADULTS AND PARENTS TOGETHER (6:30 – 7:30)****OVERVIEW OF THE *EPIC WIN* COURSE****Why did we call this course *MY LIFE AS AN EPIC WIN*?**

1. Where does the term *Epic Win* come from?

2. What are the four (4) characteristics of an *Epic Win*?

Watch 5 minute segment of **Jane McGonigal's** TED Talk on Epic Win:http://www.ted.com/talks/jane_mcgonigal_gaming_can_make_a_better_world.html

- a. _____
- b. _____
- c. _____
- d. _____

3. What would it mean to have an ***Epic Win attitude*** about life?

How does the *Epic Win* course work?

FORMAT FOR WEEKLY SESSIONS:

1. **Introduction to Session** (youth & parents together – 15 min)
2. **Review Actions Taken** from past week (30 min)
3. **Weekly Lesson:** Activity and Group Discussion (30 min)
4. **Break** (15 min)
5. **Practice skills:** Role play and Rehearsal (30 min)
6. **Make Promises** for this week (youth & parents together – 15 min)
7. **Between Sessions:** take promised actions
- to get the most out of the *Epic Win* course!

1. **INQUIRY METHOD** of learning – what is this?
Learning through discussion and responding to questions - you will discover how to create an *EPIC WIN* in areas of life that matter to you
 2. **BEING SELF-DETERMINED** – What does this mean to you?
-

One definition of Self- Determination: Being in charge of your life and your future and making choices for yourself.

3. **SELF-DETERMINED BEHAVIOURS**

In this course, you will PRACTICE to:

1. make choices, plan your future, set goals, create action plans, take actions, and problem solve. Sometimes you will make mistakes or fail to take action. But in this course, you will learn that, when you hit barriers, you don't give up. Instead, you seek support from others to keep in action.

4. **MASTERY OF SELF-DETERMINED BEHAVIOURS**

What does it mean to be a master?

You practice these skills so much during the course that, when the course is finished, you are able to use these skills to achieve future goals.

How can you increase your chances of being Self-Determined?

We have designed the course with several strategies to help you:

1. **Behaviour Contract** with course leaders
2. **Practice skills** in session – with peers and parents
3. **Weekly Promises** to take actions between sessions
4. **Fun incentive** to complete actions promised (entry into draw)
5. **Buddy system** of support between sessions

FOUNDATION SKILLS FOR CREATING AN *EPIC WIN* IN LIFE:

- **ACTIVE LISTENING** so that others will want to listen to you
- **MAKING CHOICES** for your long-term vision (1-5 years)
- **CREATING SMART GOALS** for 1-3 months ahead
- **WRITING ACTION PLANS** for how to achieve your goals
- **MAKING PROMISES** each week to take specific actions
- **TAKING ACTION** - doing what you promised to get results
- **PROBLEM SOLVING** around barriers to fulfilling on your goals
- **SEEKING SUPPORT** from your team to support your actions

These are the skills you will master in this course

TAKE A BREAK! (15 MINUTES)

YOUNG ADULT SESSION 1 (7:45 – 8:45)

GOALS FOR YOUNG ADULT SESSION 1:

- Create Rules for workability in the group
- Get to know each other
- Start to identify your Vision for the future in different areas of life

GET TO KNOW EACH OTHER (20 MIN)

1. Introduce yourself and answer the following questions:
 - a. What town do you live in?
 - b. What's your favourite movie, game or book?
 - c. What is one thing you want others to know about you (something you are good at, proud of, interested in)?
2. Everyone else ACTIVELY LISTEN and fill out GETTING TO KNOW YOU worksheet (write names along the top of form)
3. Practice ACTIVE LISTENING – Take turns remembering what did each person say about him/herself

CREATING RULES FOR GROUP WORKABILITY (15 MIN)

What are some rules that will help the group work well?

SELF-MANAGEMENT STRATEGIES IN THIS PROGRAM

1. Goal Attainment Contract Between You and Parent
2. Weekly Self-Monitoring of Homework
3. Buddy System – weekly phone calls

RAFFLE (EXTRA INCENTIVE)

- Every week, you will each receive a RAFFLE TICKET for each piece of Homework or Bonus work completed and for each promised action that you take toward your goals
- These Raffle Tickets go in our *EPIC WIN JAR OF ACCOMPLISHMENTS*
- At the 6th and 12th sessions, we will draw one name and that person will receive a \$30 gift certificate from the Penn Centre.

VISIONING YOUR FUTURE (20 MIN)

1. IDENTIFYING GOALS AND ASPIRATIONS FOR FUTURE

This course is about you and your life and what is important to you.

What your parents want is important to listen to, AND it may or may not be the same as what you want for your life.

- a. What areas of life are important to you?
In **WHEEL OF LIFE**, write 1 or more goals in each area:
 - i. Further education
 - ii. Career/Employment
 - iii. Independence
 - iv. Relationships
- b. Share with the group what you have written

2. VISION BOARD (HOMEWORK): Create a visual display to remember your long term goals in each area of life. Some examples of ways that you could represent your future goals include:

- a. picture collage
- b. story board
- c. flow chart
- d. computer display

How will YOU create your Vision Board?

SESSION 1: WRAP UP TOGETHER (8:45 - 9:00)

1. Discuss Contract and how it could help you reach your goals
2. Discuss promises for this week

PROMISED ACTIVITIES:

- ☐ Complete Vision Board (more than words!)
- ☐ Read contract and, if you choose, sign contract and bring it back next week

BONUS ACTIVITY

- ☐ Practice Active Listening with your parents (ask “What’s your favourite movie, game or book”) and report back next weekend on what that was like.

PARENT SESSION 1 (7:45 – 8:45)**GOALS FOR PARENT SESSION 1**

- Understanding why we focus on Self-Determination
- Understanding what is your role as coach for your son/daughter
- Learning Active Listening

GETTING TO KNOW EACH OTHER (10 MINUTES)

1. Share about your son/daughter:
 - a. What is one thing you like or love about your son/daughter?

- b. What is something you want others to know about your son/daughter? (for example, an interest, gift, or accomplishment)
- c. What is one of YOUR strengths that will help your son/daughter succeed?

WHY WE FOCUS ON SELF-DETERMINATION? (10 MINUTES)

Based on research, we know that those young adults who leave high school with higher ratings of self-determination have better outcomes for the future.

What are some potential benefits of being self-determined?

PARENT AS COACH (10 MINUTES)

What is your role as a coach?

How can parents support Goal Attainment through teaching Self-Determined Behaviours?

ACTIVE LISTENING (15 MINUTES)

How you can teach Active Listening:

- **What is Active Listening?** Listening, reflecting and adding nothing except perhaps an empathy statement – to make the other person feel really heard
- **Practice with another parent (2 minutes each):**
 - Listen to the other parent talk about something challenging related to their son/daughter.
 - Reflect each statement and wait for the parent to say more. Keep listening, reflecting (add nothing) and listening some more.
 - Switch roles.
- **Share with group** how did it feel to be listened to in this way? What difference might it make to listen to your son/daughter this way?
- **Practice at home:** to listen, reflect what youth says, empathize, but do not add advice or solutions. Note below what happens.

VISION BOARD (15 MINUTES):

1. Why is it important for your son/daughter to have a VISION of the future?
Why are pictures better than words alone?
2. What is your long-term vision for your son/daughter?

3. How do you think your vision is the same or different than your son/daughter's vision?
4. **Something to consider this week:** What is your vision for your own future or the future of your family? We invite you to make a Vision Board for your future.

SESSION 1: WRAP UP TOGETHER (8:45 - 9:00)

3. Discuss Contract and how it could help you reach your goals
4. Discuss promises for this week

PROMISED ACTIVITIES:

- a. Complete Vision Board (more than words!)
- b. Read contract and, if you choose, sign contract and bring it back next week

BONUS ACTIVITY

Practice Active Listening with your parents and report back next weekend on what that was like

EPIC WIN COURSE**SESSION 4: GOAL SETTING****YOUNG ADULTS AND PARENTS TOGETHER (6:30 – 6:45)****REVIEW HOMEWORK FROM LAST WEEK**☐ ***EPIC WIN ATTITUDE WORKSHEET***

Did you finish filling in worksheet and share with parents?

Did your parents share their own examples of a challenge or failure they overcame with a positive attitude?

☐ **BUILDING SUPPORTS**

Did you bring your list of THREE PEOPLE other than your parents who can support you and help you build resiliency?

BONUS ASSIGNMENT☐ **BUILDING RESILIENCY**

Did you talk to your parents about resiliency – how you are already resilient and how they see you as resilient?

NOTE: For each piece of homework you complete and hand in, you receive a Raffle Ticket to put in Epic Action Jar.

YOUNG ADULT SESSION 4**GOALS FOR YOUNG ADULT SESSION 4****Focus on Job/Career**

- How to get started in choosing a job or career goal
- Creating Long Term and Short Term goals
- Writing S.M.A.R.T. goals
- Making Promises to take ACTION

JOBS AND CAREERS (6:45 – 7:15)**WHAT DO YOU NEED TO DO TO FIND A JOB OR CREATE A CAREER?**

**FINDING A JOB OR CAREER PATH:****GETTING TO KNOW MY WORK SELF**

1. **Values** - What do you value in jobs and in workplace?

2. **Skills** - What are/were you best at in or outside of high school?

3. **Interests** - What do you enjoy doing on your own time? What are your passions?

4. **Preferences** – Who do you like to work with? At what pace do you like to work? What kind of work environment do you like?

LIST THREE POSSIBLE JOBS OR CAREER PATHWAYS THAT INTEREST YOU:

1. _____

2. _____

3. _____

RESOURCE FOR PREPARING FOR CAREER AND WORK:

Barbara Bissonette – professional coach – has written books on finding careers and jobs for people with Aspergers

Check out: <http://www.forwardmotion.info/wp/>

CREATING SHORT TERM GOALS & ACTION PLANS (7:15 – 7:45)**Big Bang Theory – drivers licence clip**

<http://www.youtube.com/watch?v=zx4KoZV9fBw>

1. **LONG TERM GOALS (1-5 years):** What job will you have or what career path will you be on?
2. **SHORT-TERM GOALS (1-3 months):** What will you be doing or what will you have achieved by the end of this course (end of February) that will move you closer to fulfilling your long-term goal?
3. **SMART GOALS:** Turn short-term goals into SMART goals
4. **ACTION PLANS** – What actions can you take (WILL you take) to fulfill on your SMART goals?

TURNING LONG TERM GOAL INTO SHORT-TERM GOALS

GAMING EXAMPLE - In video games, consider:

What is the long-term goal? (Consider your favourite games)

- To master the highest level of the game

What are some short-term goals within the game?

- Finding clues to solve a problem to get to next level
- Winning prizes or earning tokens at each level
- Earning enough points to move to the next level

EXAMPLE: ANIMAL CARE TECHNICIAN (group work)

LONG TERM GOAL (within 1-5 years)

SHORT-TERM GOALS –achievable within 1-3 months

INDIVIDUAL EXERCISE: Considering a job or career that interests you, create one **Long Term Goal** (1-5 years) and three **Short Term Goals**, achievable within 1-3 months (Use worksheet attached)

ACTIVE LISTENING:

- Each person shares one long-term goal and one short-term goal
- Who can remember what the other participants' long-term and short-term goals are?
- How do you think he/she feels about the goals just created? (For example: excited, happy, hopeful, anxious, unsure, confused, etc.)

BREAK (7:45 – 8:00)

TURNING SHORT TERM GOALS INTO S.M.A.R.T. GOALS (8:00 – 8:45)

Learn to turn YOUR 1-3 month goals into S.M.A.R.T. goals

EXAMPLE RELATED TO ANIMAL CARE TECHNICIAN:

Group work on SMART Goals (within 1-3 months):

1. Simple

2. Measureable

3. Achievable

4. Relevant

5. Within TIME frame

READ THE FOLLOWING GOALS – S.M.A.R.T. - OR NOT?

1. Soon, I will be doing what I love, caring for other people's pets

YES / NO and WHY? _____

2. Within 2 months I will have a job as a veterinary assistant and will be making \$30,000 a year.

YES / NO and WHY? _____

3. Within 2 months, I will be volunteering at Dog and Kitty Heaven, helping to bathe and groom dogs and cats at least 3 hours a week.

YES / NO and WHY? _____

WRITE ONE S.M.A.R.T. GOAL related to your Short Term Goal (use worksheet provided)

ACTIVE LISTENING:

- Each person shares his/her S.M.A.R.T. goal.
- Who can remember someone else's S.M.A.R.T. goal?
- Why is this a good S.M.A.R.T. goal (how does it meet criteria)?

TAKING ACTION IN THE WORK WORLD

What actions could you take THIS WEEK related to work or career?

FOR EXAMPLE:

- a. Find someone who is doing a job that interests you and interview him/her about that job.
- b. Search the Internet for local companies that hire people who do the job in which you are interested.
- c. Make a list of places near your home where you could volunteer to assist in a job that interests you.

JOB/CAREER RELATED ACTIONS I COULD TAKE THIS WEEK
(take 10 min. to write down your ideas)

Promised Action(s) for this Week (pick at least one)

Homework for Session 5

1. Share your Promised Action with your parent(s).
2. Share with your parents your ideas about interesting jobs or career paths. Write down one or more recommendations from your parent(s) related to actions to take.

3. Work with your parents to write another S.M.A.R.T. goal related to a different SHORT TERM job or career goal.
(Use blank S.M.A.R.T. GOAL worksheet provided)
4. Call you buddy and share your PROMISED ACTION. Support each other in taking your promised actions.

BUDDY'S NAME: _____

PHONE NUMBER: _____

SCHEDULED TIME: _____

S.M.A.R.T. GOAL PLANNING**AREA OF LIFE:** _____ **DATE:** _____

LONG TERM GOAL Where do I want to be in 1-5 years?	
SHORT TERM GOAL What do I want to achieve in 1-3 months	
S.M.A.R.T. GOAL RELATED TO SHORT TERM GOAL (2 MONTHS) 1. Simple 2. Measurable 3. Achievable 4. Realistic 5. Within Time frame What can I achieve toward my goal in the next 1-3 months?	
PROMISE: WHAT ACTION WILL I TAKE THIS WEEK RELATED TO MY SMART GOAL?	

SESSION 4: FACILITATORS' GUIDE:**WHAT DO YOU NEED TO DO TO FIND A JOB OR CAREER?**

1. Identify possible job or career paths that match interests/skills
2. Learn how to conduct job or career research
3. Write a powerful resume
4. Develop a realistic job search plan
5. Network and make job/career connections
6. Prepare for and succeed at interviews
7. Learn how to get organized and manage time
8. Develop skills to manage stress related to job search and keeping a job
9. Decide whether or not to disclose diagnosis to an employer

JOB EXAMPLE: ANIMAL CARE TECHNICIAN

LONG TERM GOAL (within 5 years), but first to get accepted into animal care program at a local college (1 year goal)

SHORT-TERM GOALS – related goals that are achievable within 2 months, for example:

- Find volunteer position to see if I like working with animals
- Through on-line research, identify what kind of jobs there are working with animals
- Through on-line research, identify college programs related to animal care within 150 km of St. Catharines
- What other short-term goals?

SMART GOAL (DEFAULT EXAMPLES)

- Finding Community Service placement for high school credit
- Finding a volunteer job for 4 hours a week to learn job skills

Appendix K

My Life as an Epic Win
Homework ChecklistDate: _____ *Epic Win* Session: _____

Homework Assignments:

1. _____
2. _____
3. _____

BONUS Homework Assignments:

1. _____
2. _____
3. _____

WEEKLY CHECK-UP

	✓ or ✗	Comments/Concerns/Challenges when completing homework
How many homework assignments completed?		
Did I complete any bonus homework assignments?		
Did I call my buddy?		
Did I discuss homework with my parents?		

Appendix L

EPIC WIN COURSE
Epic Win Action Contract

I, _____

agree to the following terms to complete the *Epic Win* course homework and take the actions I promise each week.

Having a contract with my _____ (Coach) is intended as an extra incentive to support me in taking committed actions toward creating the future I am designing.

1. Before I leave the *Epic Win* course, I will schedule time to call my Buddy and decide on who will make the call (take turns initiating the call each week).
2. Each Friday (after an Epic Win session on Thursday), I will review the course homework with my Coach to be clear about what there is to do this week. I will schedule time to complete the homework.
3. On Friday, I will also review my Promised Actions for the week with my Coach and schedule time to take those actions.
4. I will call my Buddy at the scheduled time to talk about the homework, ask how I can support my Buddy and tell him what support I need. We can also share information to get to know each other better.
5. I will complete my homework without a lot of prompting from my Coach (NOTE: You may want to add bonus points for taking actions independently, without prompting from coach).
6. I will take the Promised Actions toward my goals.
7. I will ask for support from my Coach as needed and take his/her advice so that I can be successful in completing the actions and achieving my goals.

I, _____

Coach (Parents/sibling/grandparents), agree to the following terms to support my son/sibling/grandson in working toward the goals he/she has chosen. I/we will honor this contract by providing the incentives described below when he/she takes actions toward these goals.

If my son/sibling/grandson abides by the expectations of this contract, he will be rewarded with:

If he do not stick to the expectations of this contract, the consequences are: _____

We will review our contract on this date: _____

Youth's signature: _____

Date: _____

Coach's signature: _____

Date: _____